



CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

May 16, 1980

**RECEIVED**  
MAY 19 1980

State of Utah  
Division of Oil, Gas & Mining  
1588 West, North Temple  
Salt Lake City, Utah 84116

DIVISION OF  
OIL, GAS & MINING

Attention: Bonnie Melendez

Re: Cities Service Company  
Federal DE #1  
Section 20-T23S-R18E  
Grand County, Utah

Dear Ms. Melendez:

Please find enclosed one (1) copy of the NTL-6 packet and a statement concerning Cities Service Company's lease position for the referenced well.

If there are any questions, please advise.

Sincerely,

Richard O. Berg  
Operations Manager  
Western Region

ROB/jca  
Enclosure



CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

April 23, 1980

To Whom It May Concern:

Cities Service Company, Operator of the proposed Federal "DE" #1 Well to be located in the SW/4 SE/4 of Section 20, Township 23 South, Range 18 East, has negotiated a farmout agreement with Lear Petroleum Corporation as Lessor of Utah federal lease U-40332 whereby Cities Service shall earn a portion of the aforementioned lease which covers the following described acreage:

Township 23 South, Range 18 East

Section 17: All

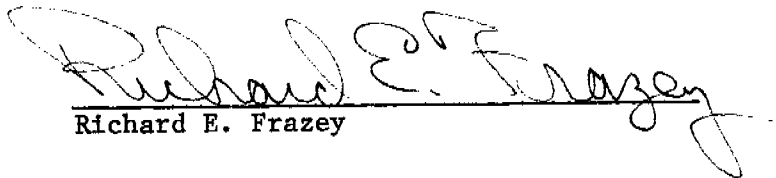
Section 18: All

Section 20: All

Section 21: W/2 SE/4, SE/4 SE/4

(containing 2,027.20 acres)  
Grand County, Utah.

CITIES SERVICE COMPANY

  
Richard E. Frazey

**RECEIVED**  
MAY 19 1980

DIVISION OF  
OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☒

## 2. NAME OF OPERATOR

CITIES SERVICE COMPANY

## 3. ADDRESS OF OPERATOR

1600 Broadway, Suite 900, Denver CO 80202

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

574' FSL &amp; 1895' FEL

SW SE

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

30 miles northwest of Moab

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

574'

## 16. NO. OF ACRES IN LEASE

2027.2

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

N/A

## 19. PROPOSED DEPTH

10,500'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4544' ungraded ground

## 22. APPROX. DATE WORK WILL START\*

June 1, 1980

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4	9-5/8	36#	1500	1600 cubic feet To Surf.
8-3/4	5-1/2	20# & 17#	10,500	*

- 1) Drill 13-3/4" hole to 1500' and set 9-5/8" OD casing.
- 2) Install BOPE and test.
- 3) Drill 8-3/4" hole to TD.
- 4) DST all legitimate oil and gas shows while drilling 8-3/4" hole to TD.
- 5) Run E-Logs: DIL w/GR, BHC Sonic w/GR, FDC-CNL w/GR, HDT.
- 6) Run 5-1/2" OD production casing to TD.

\* Volume to be calculated from caliper log to fill to the top of the Paradox salt section plus 20 percent excess.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*Richard O. Bury*

TITLE

Operations Manager

DATE

May 16, 1980

(This space for Federal or State office use)

PERMIT NO.

43-019-30647

APPROVAL DATE

5/23/80

**RECEIVED**  
MAY 19 1980

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE

5-23-80

BY

*M. J. Menden*

\*See Instructions On Reverse Side

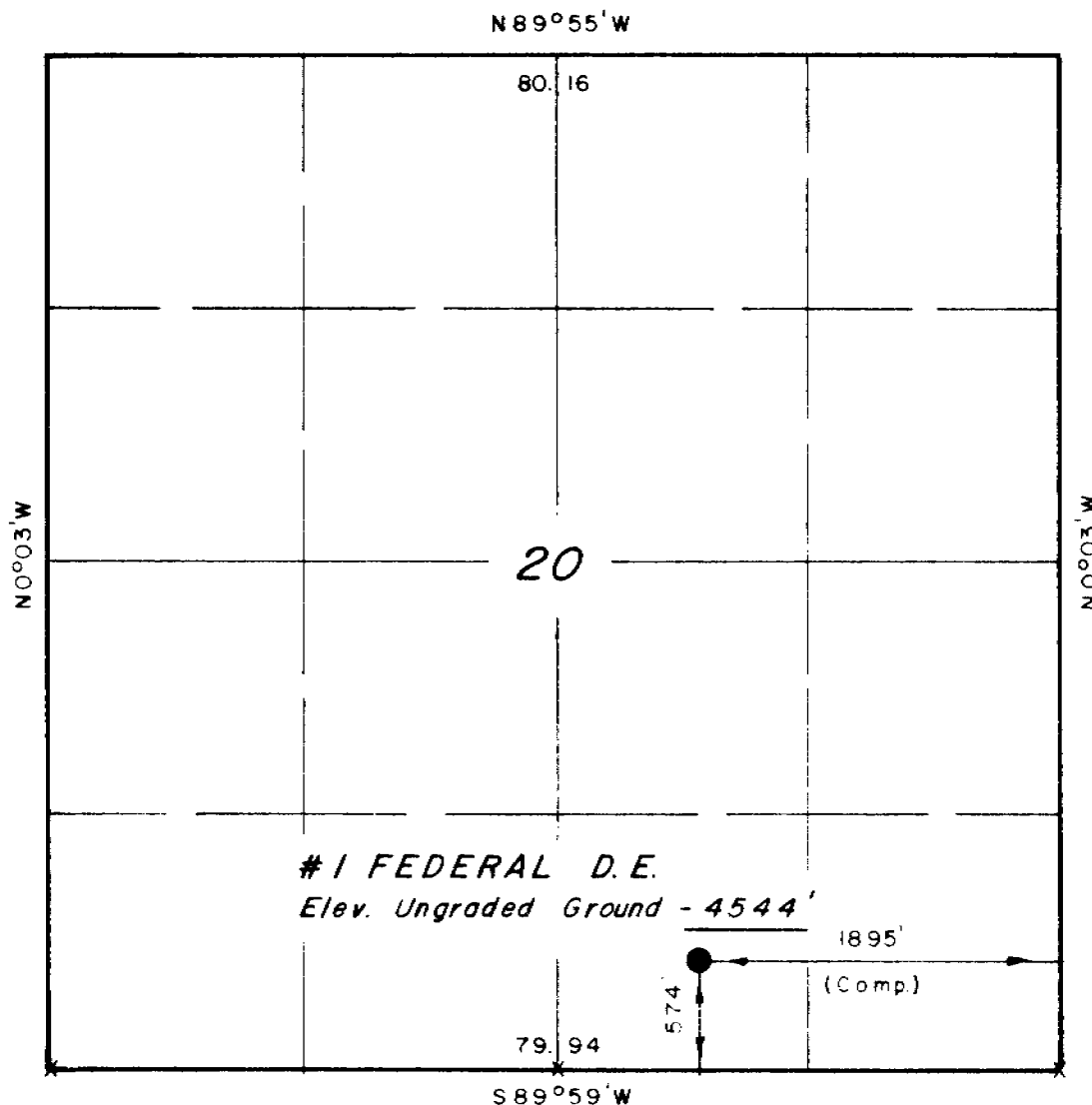
DIVISION OF  
OIL, GAS & MINING

*T 23 S , R 18 E , S.L.B.&M.*

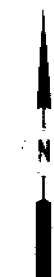
PROJECT

**CITIES SERVICE COMPANY**

Well location, #1 FEDERAL D.E.,  
located as shown in the SW1/4 SE1/4  
Section 20, T23S, R18E, S.L.B.&M.  
Grand County, Utah.



X = Section Corners Located



THE STATE OF UTAH  
COUNTY OF GRAND  
I, *[Signature]*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 2454  
STATE OF UTAH

UNION ENGINEERING & LAND SURVEYING  
P.O. BOX 6 - 100 EAST - FIRST SOUTH  
VERNAL, UTAH - 84078

1" = 1000'

3/27/80

N.J.M. D.D.

S.B.

GLO Plat

Fair & Cool

CITIES SERVICE

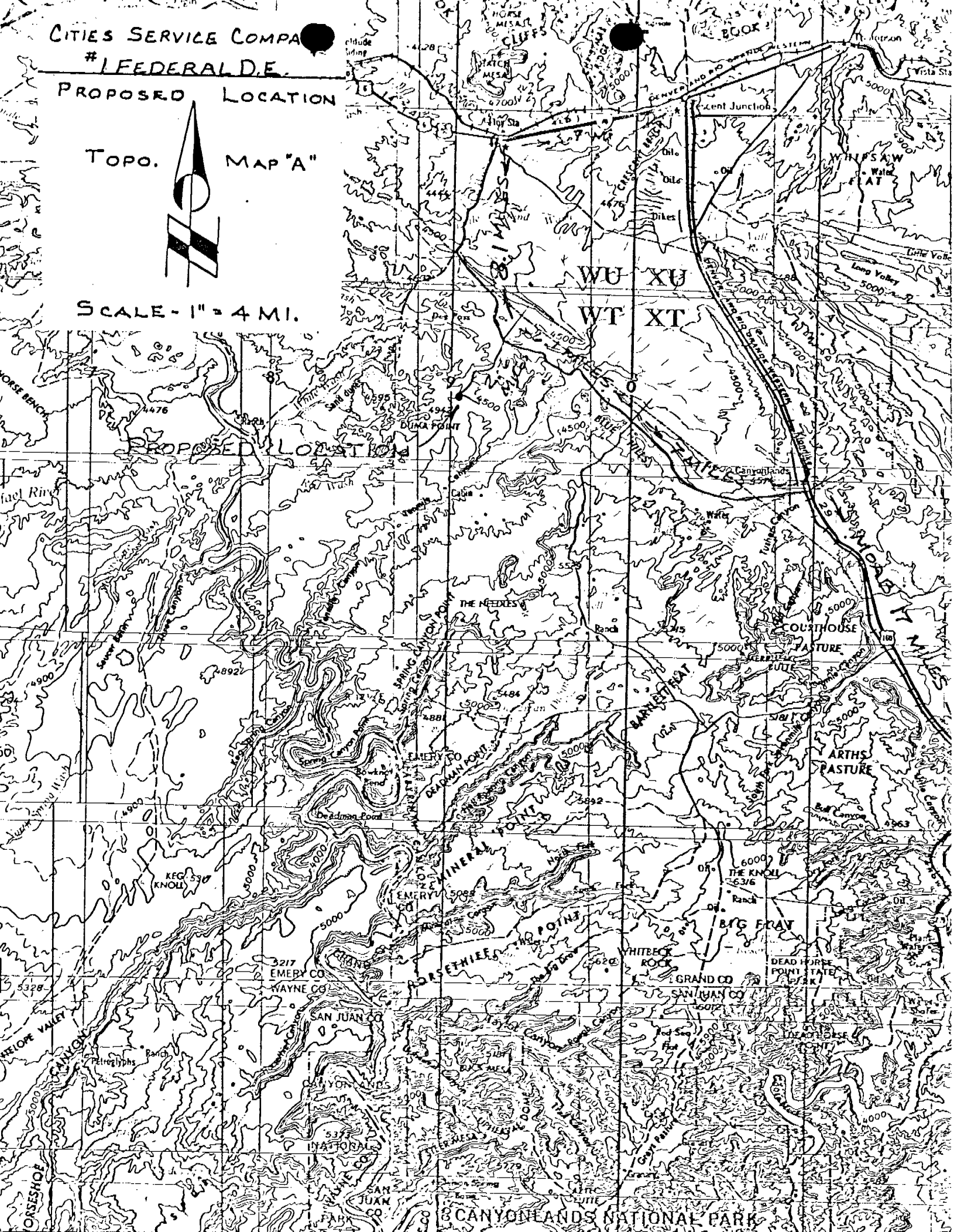
CITIES SERVICE COMP  
#1 FEDERAL D.E.

PROPOSED LOCATION

TOPO. MAP "A"



SCALE - 1" = 4 MI.



EA No. 448-80

## USUAL ENVIRONMENTAL ASSESSMENT

Date July 14, 1980

Prepared by: Glenn M. Doyle  
Environmental Scientist  
Grand Junction, Colorado

Joint Field Inspection Date: June 27, 1980

Bob Barnes	Operator
McOviatt	Drilling Contractor
Bobby Starrett	Delgarno Transportation
Elmer Duncan	Bureau of Land Management
Glenn Doyle	U. S. Geological Survey
Typing: In 7/21	
Out 7/22	

## BLM-Moab, Book Mountain Unit Resource Analysis.

BLM-Utah, 1979, Final initial wilderness inventory, USDI, August, 50 pp.

Admin Compil.  
Pao 160 x 225  
P# 150 x 150  
1300 x 1600  
21.22

## DESCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location                      State:     Utah  
   County:   Grand

574 ' F S L, 1895 ' F E L, SW ¼ SE ¼

Section 20, T235, R18E, SLBM

2. Surface Ownership                      Location:       Public  
   Access Road:   Public

Status of Reclamation Agreements: Not Applicable

3. Dates                      APD Filed:                      May 19, 1980  
   APD Technically Complete:     June 16, 1980  
   APD Administratively Complete: *June 13, 1980*

4. Project Time Frame                      Starting Date: July 1980  
   Duration of drilling activities: 100 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:

None known

6. Nearby pending actions which may affect or be affected by the proposed action:

None known

7. Status of variance requests:

None known

The following elements of the proposed action would/could result in environmental impacts:

1. A drill pad 160' wide x 325' long and a reserve pit 100' x 150' would be constructed. Approximately 1300 feet of new access road, averaging 18' in width, would be constructed from a maintained road. 2.1 acres of disturbed surface would be associated with the project.

2. Drilling

3. Waste disposal
4. Traffic
5. Water requirements
6. Completion
7. Production
8. Transportation of hydrocarbons

Details of the proposed action are described in the Application for Permit to Drill.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography - The wellsite lies in gently rolling desert terrain that is interrupted by vertical-cliffed canyons and isolated buttes.

PARAMETER

A. Geology - Surface geology is Navajo Sandstone. Other formations are listed in the 10-Point Subsurface Plan.

Information Source: Application to Drill.

1. Other Local Mineral Resources to be Protected: Potassium is potentially valuable, occurring in the Paradox Formation.

Information Source: ME, District Geologist.

2. Hazards: H<sub>2</sub>S is found in the Paradox Formation and is also possible in the Mississippian limestones. (See attached H<sub>2</sub>S contingency plan.)

Information Source: Application to Drill and ME, District Geologist.

- a. Land Stability: Location and access built on Navajo Sandstone. Material is stable, provided the slopes are moderate and moisture content is low.

Information Source: Application to Drill and Field observation.

- b. Subsidence: Subsidence can occur with the withdrawal of oil, gas, and/or water.

Information Source:

- c. Seismicity: Seismic risk: low. Statistically, greatest damage would be moderate, corresponding to intensity VII of Modified Mercalli Intensity Scale, 1931.

Information Source: Perkins, David M., 1974, Seismic risk maps, Reprint of Earthquake information bulletin, 6(6) Nov-Dec;



Algermissen, S. T., and Perkins, David M., 1977, Earthquake hazards map of the United States, Reprint from Earthquake Information Bulletin, 9(1) Jan-Feb., 4 pp.; von Hake, Carl A., Earthquake History of Utah, NOAA.

- d. High Pressure Zones/Blowout Prevention: Operator reports expected bottom-hole pressure as a maximum of 5000 psi.

Information Source:

B. Soils

1. Soil Character: No detailed soil surveys done in area. Changes in soil fertility, horizons, slope stability, etc., cannot be predicted. Soils are considered nitrogen-poor, alkaline soils that support the salt-desert community.

Information Source: Field observation.

2. Erosion/Sedimentation: Erosion/sedimentation would increase as would runoff potential. Extent of increases unpredictable without site-specific studies being done.

Information Source: Field observation.

- C. Air Quality - Wellsite lies in Class II attainment area. No Class I attainment areas are near, or adjacent to, proposed location.

Information Source: BLM-Moab, Book Mountain Unit Resource Analysis.

- D. Noise Levels - Ambient noise levels temporarily elevated. Personnel safety could be jeopardized. Wildlife would avoid area.


Information Source: Field observation.

E. Water Resources

1. Hydrologic Character

- a. Surface Waters: Minor increases in sediment load, resulting in siltation/sedimentation, could occur in nearby intermittent drainages.

Information Source: Field observation.

- b. Groundwaters: Fresh water may occur in the following formations: Entrada SS (175-350'), Navajo SS-Wingate SS (4451400'), and the White River SS (2457-2650'). Water samples should be taken at these intervals if any is found. Contamination to groundwaters through commingling with drilling fluids is possible. 

Information Source: ME, District Geologist and Field observation.

## 2. Water Quality

a. Surface Waters: Release of produced and/or circulating fluids from the reserve pit could cause a significant adverse affect on surface water quality, depending on fluid's chemical composition.

Information Source: Field observation.

b. Groundwaters: Operator proposes 1500' of surface casing. Commingling of drilling fluids with potentially usable water could render groundwater unusable. Pits would be unlined.

Information Source: Application to Drill and Field observation.

## F. Flora and Fauna

### 1. Endangered and Threatened Species Determination

Based on the formal comments received from the Bureau of Land Management on July 21, 1980, we determine that there would be no effect on endangered and threatened species and/or their critical habitat.

2. Flora: Construction would remove about 2.1 acres of vegetation increasing potential for non-point erosion and decreasing soil fertility.

Information Source: Field observation.

3. Fauna: Vegetation removal reduces wildlife habitats and food sources. Deer are not known to winter in the area. No known migratory bird nesting areas, strutting or breeding grounds, or fish-spawning areas would be impacted by proposed action.

Information Source: BLM-Moab, Book Mountain Unit Resource Analysis.

## G. Land Uses

1. General: Oil and gas operations, recreation, and grazing are major land uses. Amount and quality of land available to livestock, wildlife, and recreationists would be reduced during well life.

Information Source: Field observation.

2. Affected Floodplains and/or Wetlands: N/A

Information Source: Field observation.

H. Aesthetics: Operation would not blend with natural surroundings. Most likely unappealing to recreationists. Impact duration: life of well.

Information Source: Field observation.

I. Socioeconomics: The effect of one well on local and regional population and economy would be considered minor. If major discovery, then consider:

Population increase, community services taxed, resources depleted, cumulative impacts multiply, pipelines and transportation routes expand.

Information Source: Field observation.

J. Cultural Resources Determination: Based on the formal comments received from the Bureau of Land Management on July 21, 1980, we determine that there would be no effect on cultural resources subject to no stipulations.

Information Source: Bureau of Land Management - Moab.

K. Other: Due to the possibility of  $H_2S$  toxic gas in the Paradox Formation and the Mississippian limestones, an  $H_2S$  contingency plan is required. The plan presented at the onsite failed to address a second escape route.

Information Source: Field observation.

L. Adequacy of Restoration Plans: Rehabilitation plan judged as adequate. Problems hampering restoration: a) Area subject to short growing season; b) limited precipitation during growing season; and c) generally, very little topsoil which has limited organic matter and is low in fertility.

Information Source: David Oberwager, Env. Spec. (Reclamation), USGS-AOSO.  
G. Doyle, Environmental Scientist, USGS.

#### Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

#### Adverse Environmental Effects:

1. If approved as proposed:

a. About 2.1 acres of vegetation would be removed, increasing and accelerating erosion potential.

b. Pollution of groundwater systems <sup>could</sup> would occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.

- d. The potential for fires, leaks, spills of gas and oil or water exists.
- e. During construction and drilling phases of the operation, noise and dust levels would increase.
- f. Distractions from aesthetics during the lifetime of the project would exist.
- g. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution would exist through leaks and spills.
- h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of an irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.
- i. Other:
  - 1) Freshwater zones need to be protected from interaquifer leakage and downhole chemical pollutants.
  - 2) H<sub>2</sub>S toxic gas may be released during the drilling of this well. H<sub>2</sub>S-serviceable equipment should be used. Contingency plan should address upwind escape route(s). H<sub>2</sub>S scavengers cannot be the chromate-type due to the ban on these substances by EPA. Public warning signs need to be posted to alert co-users of the area to the danger.

## 2. Conditional approval

- a. All adverse impacts described in section one above would occur, except
  - 1) By sampling water shows in the formations identified in Section E.1.b. of this assessment, freshwater zones may be located. Casing and cementing program should protect these freshwater resources.
  - 2) Operator's H<sub>2</sub>S contingency plan does not address:
    - a) Upwind escape route(s),
    - b) Danger/Caution signs for the public on nearby roads.

### Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

- 1. See attached Lease Stipulations.

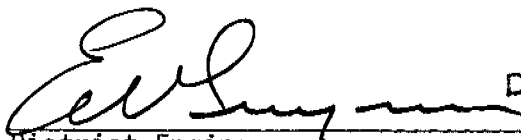
2. See attached BLM Stipulations.
3. Protect and sample any freshwater shows in any or all of the following formations: Entrada, Navajo, Wingate, and the White Rim Sandstones.
4. Update H<sub>2</sub>S contingency plan to include upwind escape route(s).
5. Place an adequately-sized caution/danger-poison gas sign at the point where the new access road leaves the existing road.

Controversial Issues and Conservation Division Response: None known.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102(2)(C).



DISTRICT ENGINEER

AUG 05 1980

District Engineer  
U. S. Geological Survey  
Conservation Division  
Oil & Gas Operations  
Salt Lake City District

Date



Cities Service Co. Fed. DE #1  
Sec. 20, T33S, R18E, Grand Co.,  
Utah

# Seed Mixture

		<u>Lbs./Acre</u>
<u>Grasses</u>		
Oryzopsis hymenoides	Indian ricegrass	1
Hilaria jamesii	Curley grass	1
<u>Forbs</u>		
Sphaeralcea coccinia	Globemallow	1
<u>Shrubs</u>		
Atriplex confertifolia	Shadscale	1
Artemisia spinescens	Bud Sage	1
Ephedra nevadensis	Mormon Tea	1
		<hr/> 6

FROM : DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH  
TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH  
SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-40332

OPERATOR: CITIES SERVICE CO.

WELL NO. 1

LOCATION: SE 1/4 SW 1/4 SE 1/4 sec. 20, T. 23S, R. 18E, SLM

GRAND County, UTAH

OPERATOR'S SURFACE FORMATION ERRONEOUS.

1. Stratigraphy:

MORRISON FM 0  
(SALT WASH MEM)

ENTRADA SS 175'

NAVAJO SS 445'

WINGATE SS 950'

CHINLE FM 1400'

WHITE RIM SS 2457'

CUTLER Gp 2722'

PARADOX SALT 5440'

BASE SALT 9470'

LEAUVILLE LS 9700'

OURAY LS 10,300'

ELBERT FM 10,400'

TD 10,500'

2. Fresh Water: OPERATOR SHOULD CHECK FOR WATER IN THE FOLLOWING ZONES AND SAMPLE ANY WATER FOUND: ENTRADA SS (175'-350'); NAVAJO SS - WINGATE SS (445'-1400'); WHITE RIM SS (2457'-2650');

3. Leasable Minerals:

OIL OR GAS FROM THE PARADOX, LEAUVILLE, OURAY OR ELBERT.

LAND POTENTIALLY VALUABLE FOR POTASSIUM FROM PARADOX FM.

4. Additional Logs Needed:

LOGGING PROGRAM SUFFICIENT

5. Potential Geologic Hazards:

H<sub>2</sub>S FOUND IN PARADOX FM; OPERATOR RECOGNIZES POTENTIAL HAZARD. \* ALSO POSSIBLE IN MISSISSIPPIAN LIMESTONES.

6. References and Remarks:

USGS MAP I-57, PI FILES; 23S 18E SEC 21, 1-21 MOUNTAIN FUEL-FEDERAZ  
USGS, WRD REPORT. 23S 18E SEC 24, 1 KLONDIKE UNIT.

Signature: Kenneth J. Selt

Date: 04 - JUN - 1980

12 JUN REC'D

10 Point Supplement

Cities Service Company  
Federal DE #1  
Section 20, T23S, R18E, SL B&M

I. Surface Geology:

- A. Navajo
- B. Elevation - 4544' MSL (ungraded)

II. Estimated Tops of Geological Markers:

- A. White Rim - 2100'
- B. Cutler - 2350'
- C. Paradox Salt - 5450'
- D. Base Salt - 9470'
- E. Leadville - 9700'
- F. Ouray - 10300'
- G. Elbert - 10400'

III. Estimated Depth of Water, Hydrocarbons or other Mineral Bearing Zones:

- A. Leadville - Water and/or hydrocarbons
- B. Paradox - Water and/or hydrocarbons
- C. Ouray - Water and/or hydrocarbons
- D. Elbert - Water and/or hydrocarbons

IV. Casing and Cementing Program:

A. Casing

- 1. Surface: 1500' of new 9-5/8" OD, K55, 36#/ft, ST&C casing.
- 2. Production (bottom to top):
  - 5100' of new 5-1/2" OD, N80, 20#/ft, LT&C
  - 5400' of new 5-1/2" OD, N80, 17#/ft, LT&C

B. Cementing

- 1. Surface: 875 sacks 65-35 poz with 6% gel, 2%  $\text{CaCl}_2$  and 1/4#/sk LCM followed by 250 sacks Class 'G' with 2%  $\text{CaCl}_2$ . 100 percent excess.
- 2. Production: Volume of cement will be calculated from caliper log to fill to the top of the Paradox salt section plus 20% excess cement. Stage cementing will be considered pending evaluation of the wellbore. Amounts and types of cement are subject to change due to unforeseen circumstances, changes in design criteria or improvements in technology.



V. Pressure Control Equipment: Plat 'A'

- A. Casinghead - 9-5/8" SOW X 10"-3000 psi wp.
- B. BOPE - 1-3000 psi wp hydraulic double gate ram type preventor with pipe and blind rams and 1-3000 psi wp annular bag type preventor.
- C. Choke Equipment - 3000 psi wp choke manifold piped from drilling spool with manual choke and remote-controlled choke, both with flare lines.
- D. Testing Procedure - Before drilling under surface casing BOPE, spools, casinghead, casing and choke manifold will be tested to 3000 psi. Thereafter, BOPE will be function tested daily.

VI. Mud Program:

Low solids non dispersed from spud to top of Paradox salt. Saturated salt water mud from Paradox salt to TD. Barite will be added to maintain sufficient mud weight to control formation pressure. Sufficient materials will be available to rebuild the entire mud volume in the event of lost circulation. An emergency volume of barite will be available.

VII. Auxiliary Equipment:

- A. Kelly cock.
- B. Inside blowout preventor valves located on the rig floor.
- C. Mud-gas separation equipment, as required.
- D. Full time mud logger from base of surface casing to TD with full data package including H<sub>2</sub>S detection system.

VIII. Testing Program:

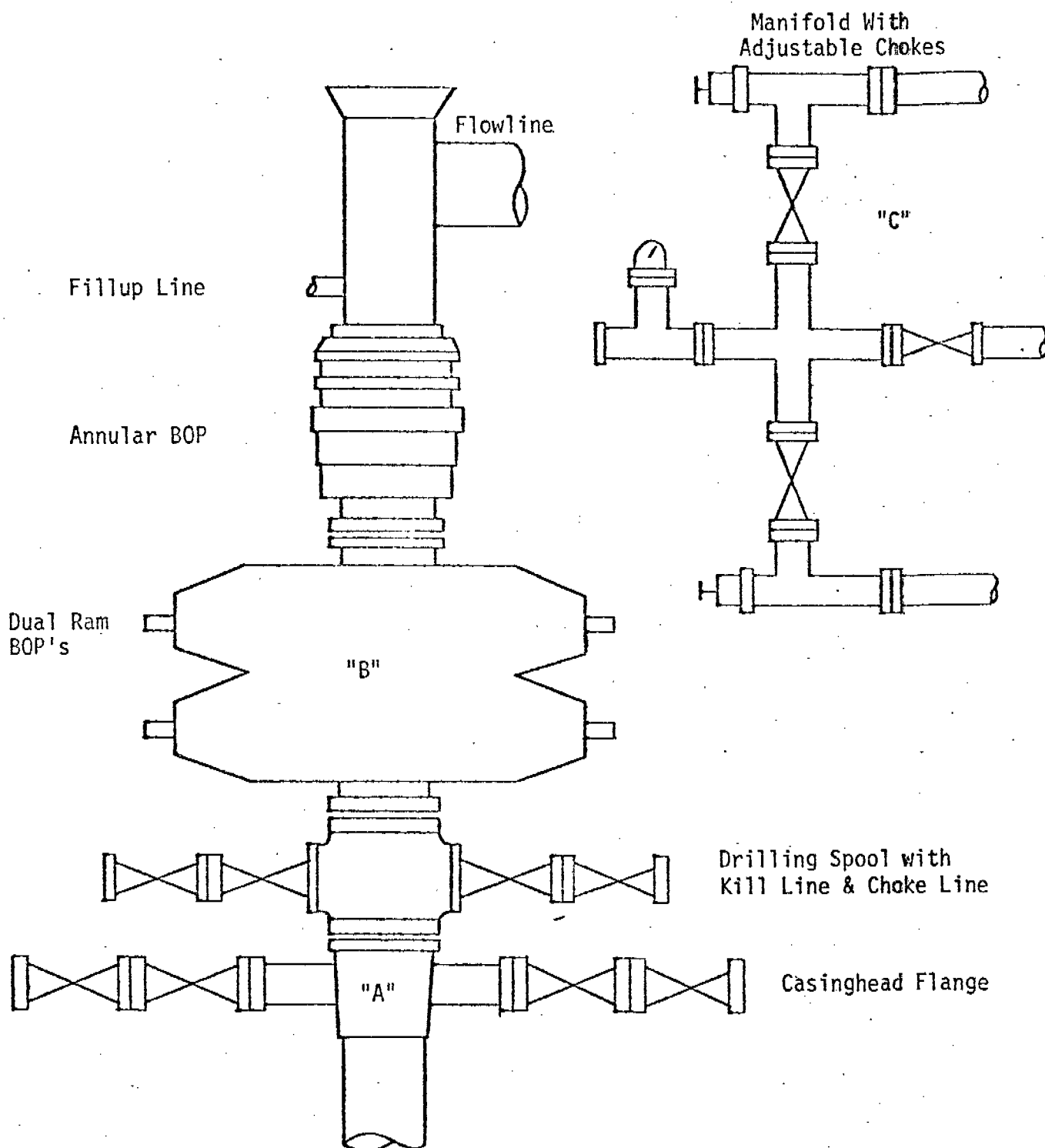
- A. Electric Logs - from surface casing to TD as follows:
  - 1. Dual Laterolog with Gamma Ray.
  - 2. BHC Sonic with Gamma Ray.
  - 3. FDC-CNL.
  - 4. Dipmeter.
- B. DST - all substantial oil and gas shows.
- C. Coring - none planned.
- D. Well Stimulation - possible, pending evaluation of potential reservoirs (type, size, etc.). Permitting will be by Sundry notice.

IX. Anticipated Hazards:

- A. Abnormal Pressure - not anticipated. Maximum expected bottomhole pressure is approximately 5000 psi.
- B. Abnormal Temperature - not anticipated.
- C. Lost Circulation - a possible problem. Proper drilling fluid rheology and prudent drilling practices will be utilized to minimize pressure transient effects while drilling and tripping. Additions of LCM to the active mud system, high filtration rate slurry squeezes and lightening the mud column may be employed to combat loss of circulation.
- D. Hydrogen Sulfide -  $H_2S$  has been encountered within the Paleozoic Era sediments in this province.  $H_2S$  monitoring equipment and mud scavengers will be maintained on location from spud to TD.  $H_2S$  safety equipment, supplied and maintained by a third party, will be available in advance of penetrating expected formations historically known to contain  $H_2S$ .

X. Timing:

- A. Road and location construction should begin as soon as permit approval is gained, weather permitting.
- B. Drilling should commence as soon as road and location construction and mobilization are completed pending rig availability.
- C. Duration of Operations - 100 days estimated.



## 13 Point Surface Use Plan

CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

### 1. EXISTING ROADS

See attached Topographic Map "A".

To reach Cities Service Company, well location Federal DE-1, located in the SW $\frac{1}{4}$  SE $\frac{1}{4}$  Section 20, T23S, R18E, S.L.B. & M. from Moab, Utah:

Proceed Northerly from Moab, Utah along U.S. Highway 160 - 17 miles to its junction with a road which exits to the West; proceed Northwesterly along this road 7 miles to its junction with a road which continues in a Northwesterly direction; proceed Northwesterly along this road 6.1 miles to its junction with a road to the Southwest; proceed Southwesterly along this road 2.6 miles to the point of beginning of the proposed access road (to be discussed in Item #2).

An alternate route to this location will be from Crescent Junction, Utah;

Proceed Westerly from Crescent Junction, Utah along Interstate 70 - 7 miles to an off ramp which exits onto a road to the South; proceed Southwesterly along this road 4.3 miles to its junction with a road to the Southeast; proceed Southeasterly along this road 3.8 miles to its junction with the previously described road, and the road to the Southwest of the proposed road intersection.

U.S. Highway 160 and Interstate 70 are bituminous surfaced road and are maintained by Utah State road crews.

The road that leaves U.S. Highway 160 and proceeds to the first junction 7 miles is an improved dirt road and is maintained by Grand County, road maintainance crews. The other roads described above are dirt surfaced roads which are under county road systems but not maintained on a regular basis. These existing roads are constructed out of the native materials accumulated while they were being built, which consists of light brown sandy clay soils with some fine gravels.

The last 1 mile of the above described road will require some minor upgrading, which will consist of smoothing the road grade with a blade. There will be no other anticipated construction on any of the other roads described above. They will meet the necessary standards required to facilitate an orderly flow of traffic during the drilling phase, completion phase, and production phase of this well at such time that production is established.

CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

1. EXISTING ROADS - continued

The roads that are required for access during the drilling phase, completion phase, and production phase of this well will be maintained to insure proper travel both entering and leaving the area. This may require some minor grader work, for smoothing of the road bed and for snow removal. It may be necessary that some culverts be reinstalled if washed out by excess water from abnormal conditions.

The Highways mentioned herein are under Utah State jurisdiction, all other roads in the area are Carbon County roads and administered by them.

2. PLANNED ACCESS ROAD

See Topographic Map "B".

The planned access road leaves the existing road described in Item #1 in the NW $\frac{1}{4}$  SE $\frac{1}{4}$  Section 20, T23S, R18E, S.L.B. & M. and proceeds in a South-westerly direction approximately 1300' to the proposed location site.

This road will slope at approximately a 2% grade. The area is relatively flat with very few breaks.

This proposed road will be an 18' crowned road (9' either side of the centerline) with drain ditches required along the sides of the road which will handle any run off from normal meteorological conditions that are prevalent to the area.

It is not anticipated that there will be any culverts required along this road as it crosses no drainages of any consequence.

The total width of the disturbed area will be determined by the amount of cut and fill required along any given portion of the road. Every possible effort will be made to keep the damaged area to a minimum. Back slopes along the cut areas of the road will be 1 $\frac{1}{2}$  to 1 slopes and terraced.

If deemed necessary at the time of the onsite inspection turnouts will be constructed for safety purposes. These turnouts will be constructed according to the specifications found on page 25 of the Oil & Gas surface operating standards manual prepared by the B.L.M. and U.S.G.S.

There are no fences encountered by this proposed road. There will be no new gates or cattleguards.

All lands involved under this planned access road are under B.L.M. jurisdiction.

CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

3. LOCATION OF EXISTING WELLS

See Topographic Map "B".

There is one dry hole (abandoned well) within a three mile radius of this location site. It is located in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  Section 21, T23S, R18E, S.L.B. & M.

There are no known water, producing, temporarily abandoned, shut-in, injection, disposal or drilling wells within a three mile radius of this location site.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

There are no tank batteries, production facilities, oil gathering lines, gas gathering lines, injection lines or disposal lines belonging to Cities Service Company, within a three mile radius of the location site.

In the event production established, all production will be contained within the location site. It is not known at this time where the proposed facilities or what facilities will be needed for this. Plans will be submitted to the proper authorities before any action is taken pertaining to production facilities.

All areas used to contain production within the location site will be temporary and will be constructed from native materials prevalent to the area. These facilities will be constructed using bulldozers, graders and workman crews.

Rehabilitation of disturbed areas no longer needed for operations after construction is completed will meet the requirements of Item #10.

5. LOCATION AND TYPE OF WATER SUPPLY

Water to be used in the drilling of this well will be hauled by truck over the existing roads described in Items #1 and #2 from the Colorado River at the point where U.S. Highway 160 crosses it north of Moab, Utah, SW NW Section 21, T25S, R21E.

Optional water supplies will be located at a spring  $4\frac{1}{2}$  miles south of the location following the primary access road. Also, the seven-mile water hole, which is located nine miles north of Moab at Dead Horse Point, will be considered for fresh water supplies. There may be a water well drilled at this proposed location site to a maximum depth of 1000'. (SW SE Section 20, T23S, R18E.)

All appropriate permits will be obtained for use of this water from proper authorities.

6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. No additional road gravels or pit lining material from other sources are anticipated at this time, but if they are required the appropriate actions will be taken to acquire them from private sources.

All surface disturbance area is on B.L.M. lands.

7. METHODS FOR HANDLING WASTE DISPOSAL

See Location Layout Sheet.

A reserve pit will be constructed.

The reserve pit will be approximately 8' deep and at least one half of this depth shall be below the surface of the existing ground.

One half of the reserve pit will be used as a fresh water storage area during the drilling of this well and other one half will be used to store non-flammable materials such as cuttings, salts, drilling fluids, chemicals and produced fluids, etc.

If deemed necessary by the agencies concerned to prevent contamination to surrounding areas, the reserve pits will be lined with a gel.

The pits will have wire and overhead flagging installed if deemed necessary to protect the water fowl, wildlife, and domestic animals.

As stated herein, non-flammable materials such as cuttings, salts, and drilling fluids, will be contained in the reserve pits.

At the onset of drilling, the reserve pit will be fenced on three sides and at the time drilling activities are completed, it will be fenced on the fourth side and allowed to dry completely prior to the time that backfilling and other reclamation activities are attempted.

When the reserve pit dries and reclamation activities commence, the pits will be covered with a minimum of four feet of soil and all requirements in Item #10 will be followed.

All produced water, if any, will be disposed of according to NTL-2B requirements.

All garbage and other waste material will be contained in a trash

7. METHODS FOR HANDLING WASTE DISPOSAL - continued

basket made of small mesh wire and will be taken to the nearest sanitary landfill for disposal upon completion of the well.

A portable toilet will be supplied for human waste.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen.

9. WELL SITE LAYOUT

See Location Layout Sheet.

The B.L.M. District Manager shall be notified before any construction begins on the proposed location site.

As mentioned in Item #7, the pits will be unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and would cause contamination to the surrounding area. Then the pits will be lined with a gel and any other materials necessary to make them safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil on the location site, all topsoil shall be stripped and stockpiled. When all drilling and production activities have been completed the location site and access road will be reshaped as near as possible to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the pits shall be buried with a minimum of 4' of cover.

As mentioned in Item #7, the reserve pits will be completely fenced with wire and overhead flagging installed if there is oil in the pits, and then allowed to dry completely before covering. All items mentioned above will be completed within 90 days after commencement of restoration procedures.



CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

10. PLANS FOR RESTORATION OF SURFACE - continued

When restoration activities have been completed, the location site and access ramp shall be reseeded with a seed mixture recommended by the B.L.M. District Manager when the moisture content of the soil is adequate for germination. The Lessee further covenants and agrees that all of said clean-up and restoration activities shall be done and performed in a diligent and most workmanlike manner and in strict conformity with the above mentioned Items #7 and #10, and the Oil & Gas surface operating standards manual.

11. OTHER INFORMATION

The Topography of the General Area (See Topographic Map "A").

The general area is a large valley known as the Grand Valley. This valley is bordered on the North by the Book Cliff Mountains and the Green River and by the Colorado River and Henrey Mountains on the South.

The soils in this semi-arid area of the Williams Fork Formation (Upper Cretaceous) and the Wasatch Formation (Eocene) consist of light brownish-gray clays (OL) to sandy soils (SM-ML) type with poorly graded gravels.

Outcrops of sandstone ledges, conglomerate deposits and shale are common in this area.

The topsoils in the area range from a sandy clay (SM-ML) type soil to a clayey (OL) type soil.

The majority of the numerous washes and streams in the area are of a nonperennial nature flowing during the early spring run-off and heavy rain storms of long duration which are rare as the normal annual rainfall in the area is only 8".

The Green River flows from the North to the South into the Colorado River. These two Rivers are the only perennial water courses in the general area.

Due to the low precipitation average, climate conditions, and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid regions and consists of areas of sagebrush, rabbitbrush, greasewood, some grasses, and cacti, with large areas devoid of any vegetation.

The fauna of the area consist predominantly of the mule deer, coyotes, bears, rabbits, and varieties of small ground squirrels and other types of rodents. The area is used by man for the primary purpose of grazing sheep and cattle.

CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

11. OTHER INFORMATION - continued

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

The Topography of the Immediate Area (See Topographic Map "B").

Federal DE-1 sits on a relatively flat area which slopes gradually to the Southwest into Tenmile Canyon which drains to the Southwest approximately 10 miles into the Green River.

The ground slopes through this location at approximately a 3% grade.

The majority of the drainages in the area around this location are non-perennial and run in a Southwesterly direction into the aforementioned Green River.

The geologic structure of the area immediately surrounding the location site is of the Williams Fork Formation and consists of light brown sandy clay soil with some sandstone outcrops.

The vegetation in the immediate area surround the location site is predominantly sagebrush, grasses and cacti.

All lands disturbed by this location site and road are under B.L.M. jurisdiction.

There are no occupied dwellings or other facilities of this nature in the general area. There are no visible historical, or cultural sites within any reasonable proximity of the proposed location site. It will be determined by an archaeologist whether there are any archaeological findings in the area.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Richard O. Berg  
1600 Broadway  
Suite 900  
Denver, Colorado 80202

Telephone: (303) 861-2464

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with

CITIES SERVICE COMPANY  
Federal DE-1  
Section 20, T23S, R18E, S.L.B. & M.

13. CERTIFICATION - continued

the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; that the work associated with the operations proposed herein will be performed by Cities Service Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

May 16, 1980  
Date

Richard O. Berg  
Richard O. Berg  
Operations Manager  
Western Region

CITIES SERVICE CO. ANY

#1 FEDERAL D.E.

PROPOSED LOCATION

TOPO.

MAP "B"

SCALE - 1" = 5000'

ROAD CLASSIFICATION

Heavy-duty

Light-duty

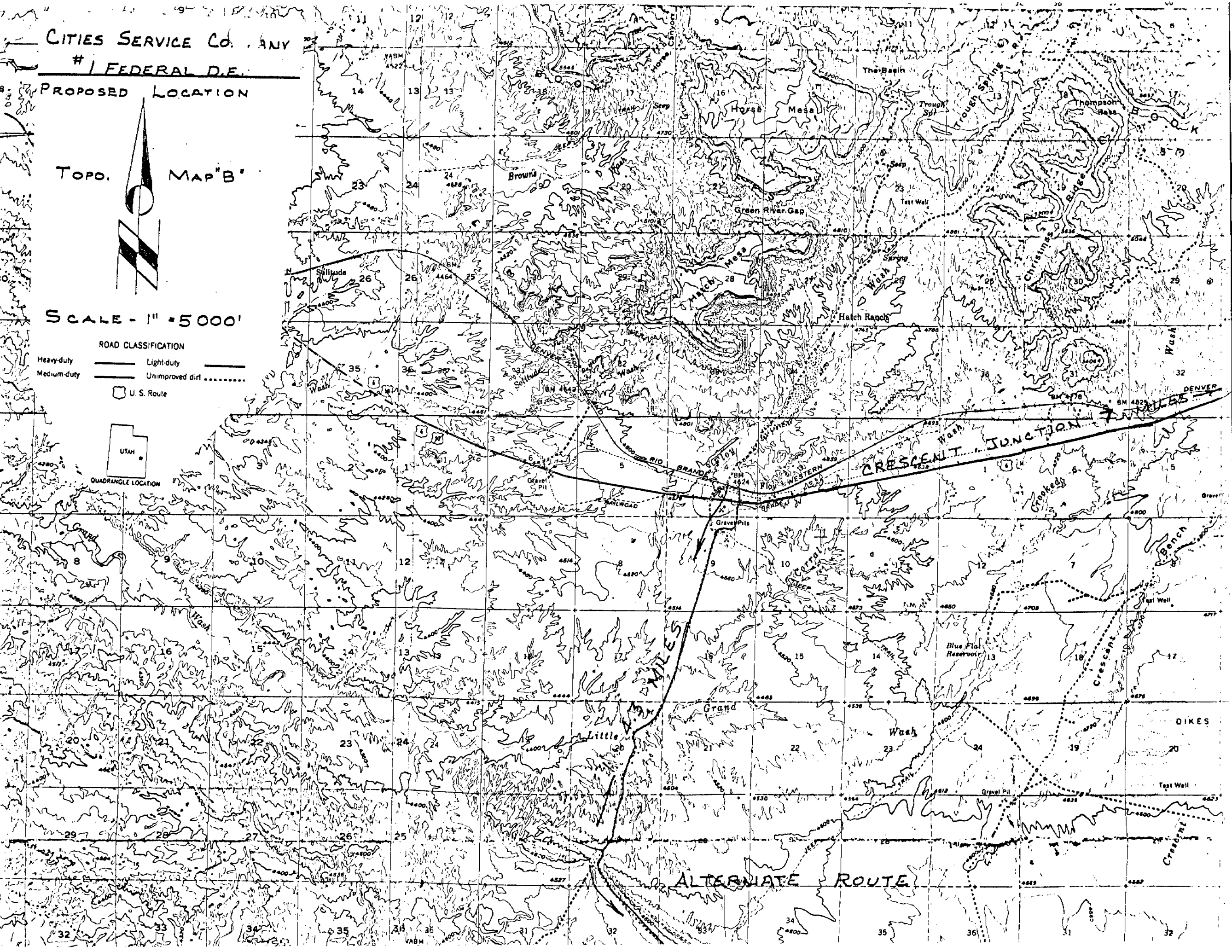
Medium-duty

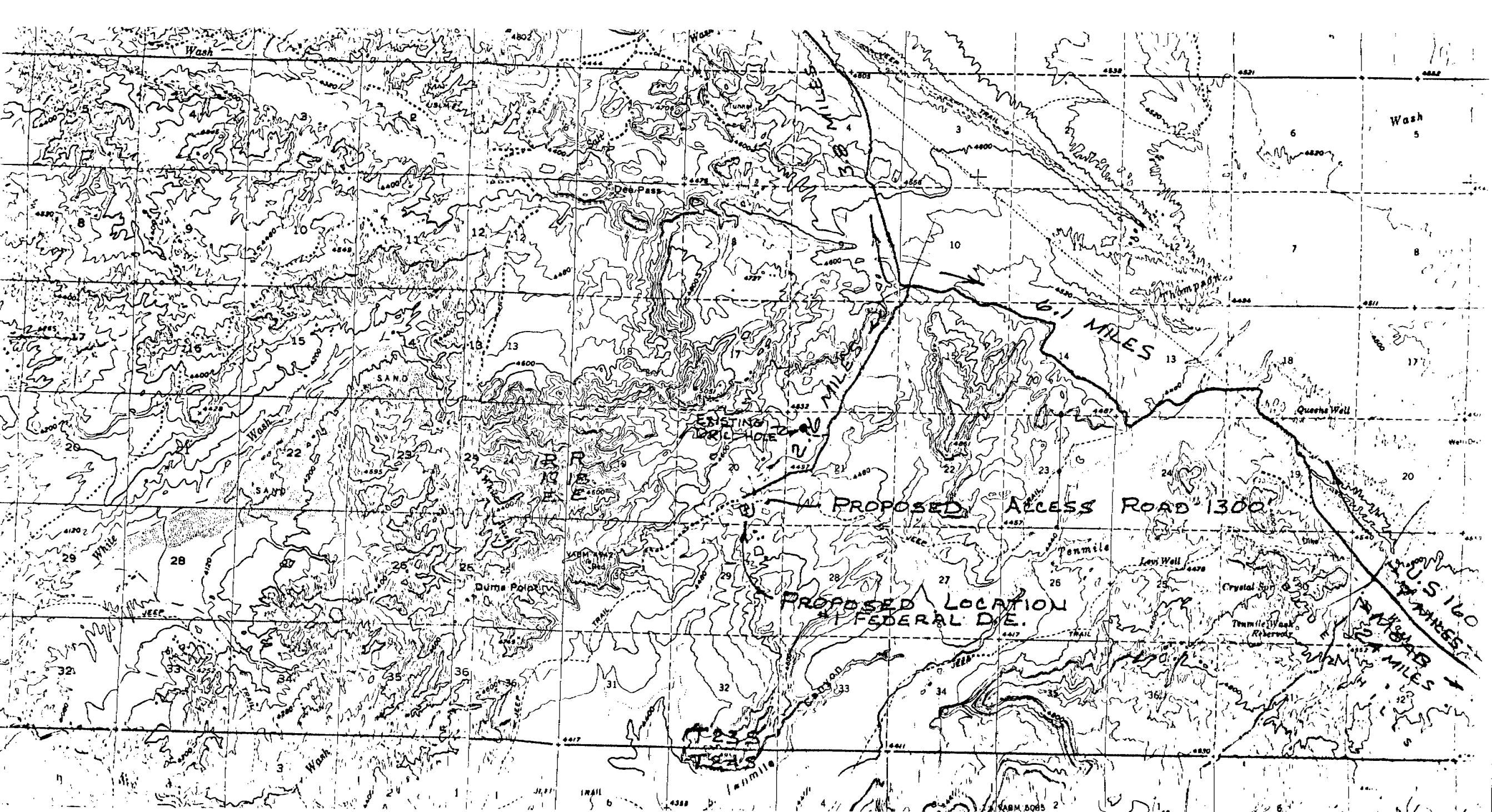
Unimproved dirt

U. S. Route



QUADRANGLE LOCATION

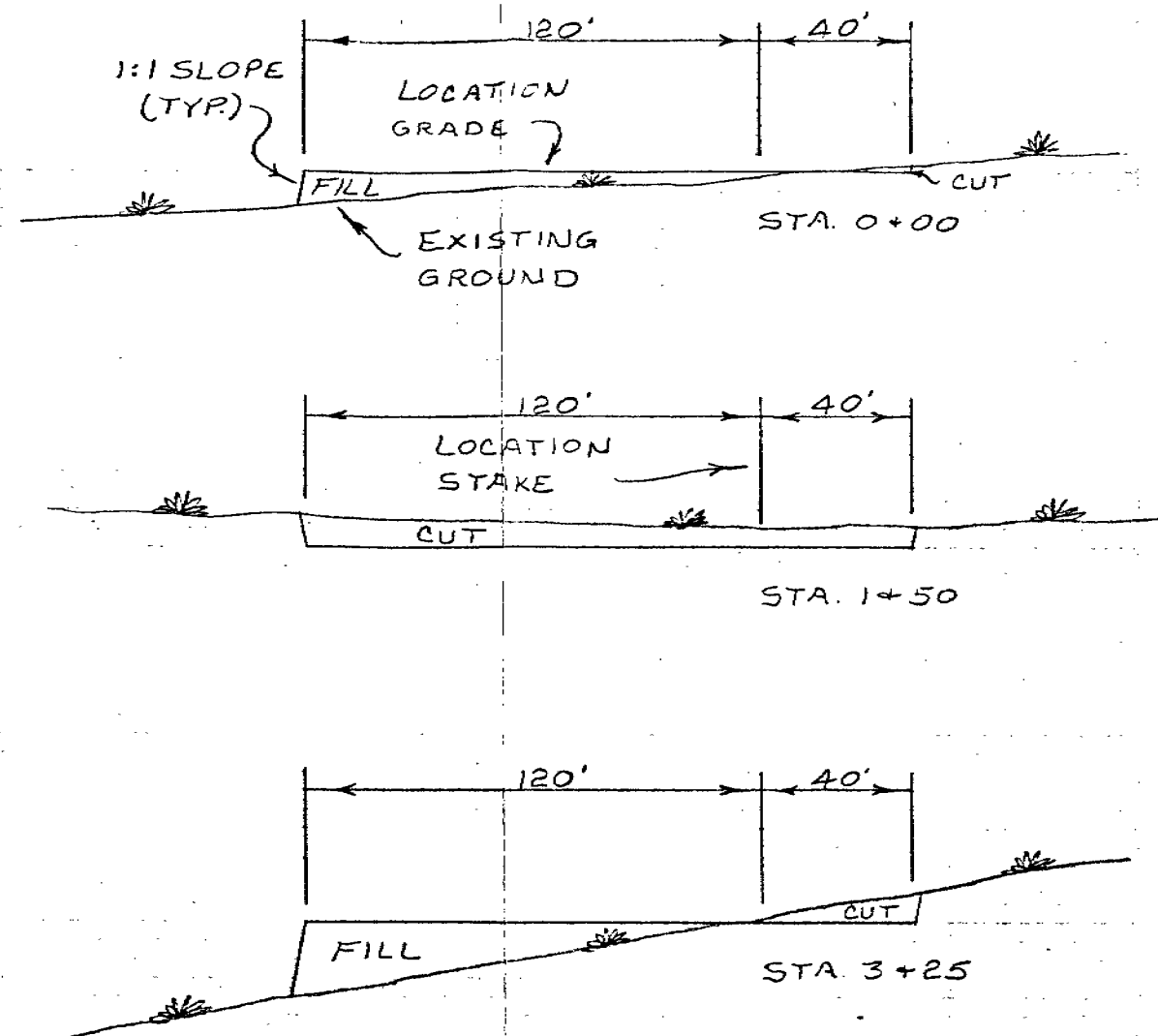




CITIES SERVICE COMPANY  
#1 FEDERAL D.E.  
LOCATION LAYOUT SHEET

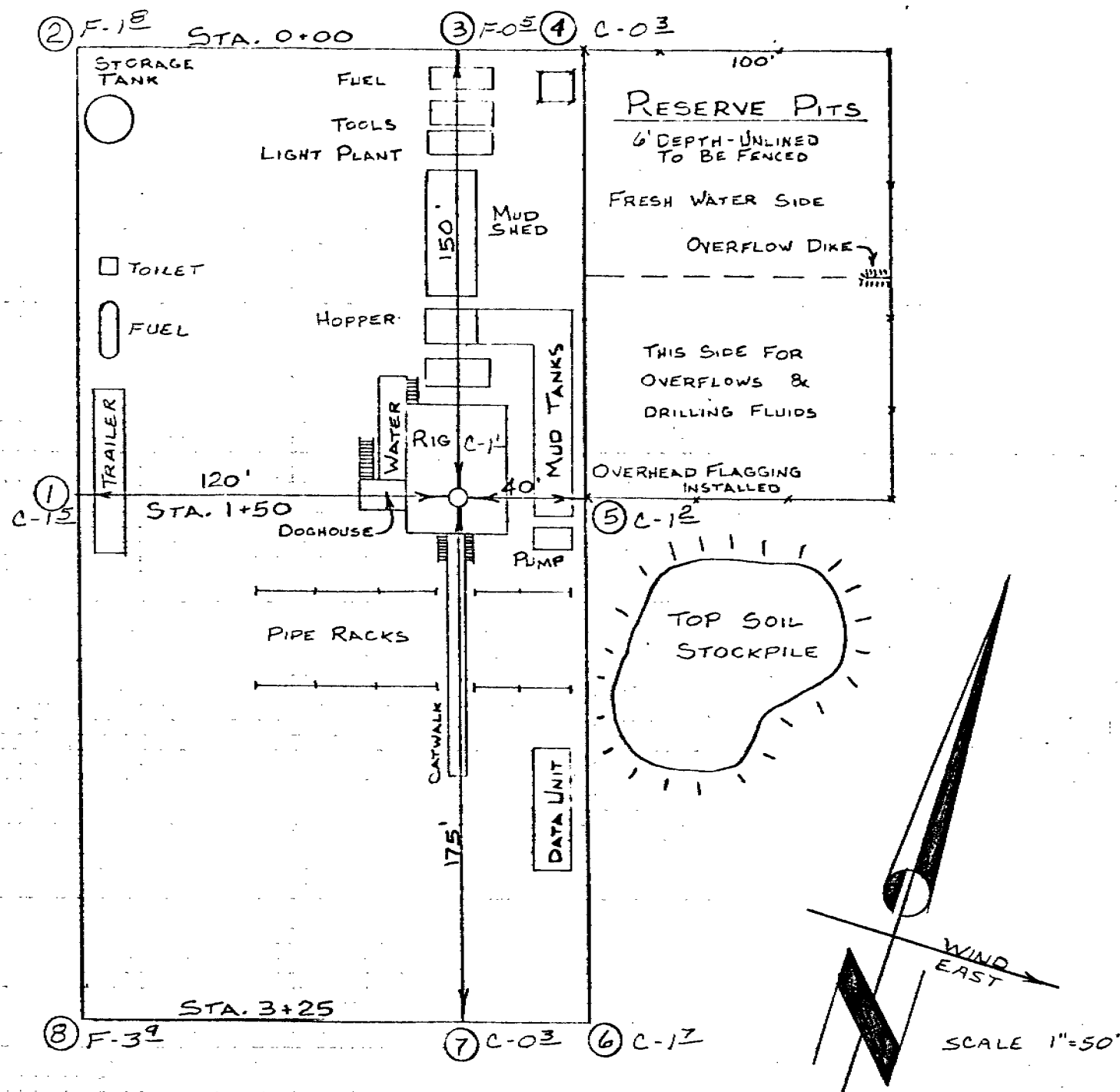
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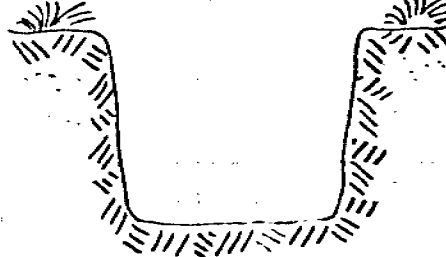
APPROX. YARDAGES

CUT - 1,353 CU. YDS.  
FILL - 1,136 CU. YDS.



SOILS LITHOLOGY

- NO SCALE -



BROWNISH GRAY  
SANDY CLAY

SCALE 1"=50'

Memorandum

*Glenn*

*Active Service Co.*  
20-235-182

To: District Oil and Gas Engineer, Mr. Edward Guynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-40332 Well No. 1

1. The location appears potentially valuable for:

☐ strip mining\*

☒ underground mining\*\* *potash*

☐ has no known potential.

2. The proposed area is

☐ under a Federal lease for \_\_\_\_\_ under the jurisdiction of this office.

☒ not under a Federal lease under the jurisdiction of this office.

☒ Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

\*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at \_\_\_\_\_ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

\*\*If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed

*Allen J. Vance*

JUN 16 REC'D

## STANDARD STIPULATIONS FOR OIL AND GAS EXPLORATION

Contact this office at least 24 hours prior to beginning construction of access road and pad.

Stockpile the surface 6" of topsoil in a wind-row on the Southeast quadrant of the location.

The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

Notify the BLM District Archaeologist if cultural material from sub-surface deposits is exposed during the operation.

The trash cage will be at the location and fenced with fine mesh wire during drilling operations.

The "blooey" line will be centered and directed into the pit.

If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil and Gas" pamphlet (joint BLM,USGS,USFS publication).

If production is obtained, all production facilities will be painted "desert tan" or a similar color approved by the Grand Resource Area Manager..

Rehabilitation of the site and access road will be accomplished in accordance with the enclosed restoration procedures.

Production facilities and pipeline route are approved on this location under lease rights.

As agreed upon at the pre-drill field examination:

- 1) Water will be hauled from the Colorado River near Moab.
- 2) Hog wire or woven wire will be used to fence the reserve pit. A strand of barbed wire will be put on top of the woven wire for support.
- 3) Access by county roads will be from I-70.
- 4) New access road surface will be from county road in SE¼ Sec.20 T. 23 S., R. 18 E. to the well in SWSE T. 20 S., R. 23 E. Low water crossings will be placed in each drainage; topsoils from the road will be wind-rowed along the East side of the road and the disturbed width will be 24 feet wide with 18 feet wide travel surface.
- 5) Deadly poison gas ( $H_2S$ ) may be encountered in drilling, so warning signs will be placed along the county road South of the well and at the county road junction in the SWSW Section 10 T. 23.,R.18 E.
- 6) Inform BLM of water encountered during drilling of the well.



# RECLAMATION PROCEDURES IN GRAND RIVER AREA

1. Disk or rip pads and access roads.
  - a. Overlap passes in order to insure complete treatment.
2. Contour pads and access roads.
  - a. Lay berms into centers.
  - b. Use cut material for fill areas.
  - c. Lay stockpiled surface soil over top of pads and spread evenly.
  - d. On highly erosive soils, it may be more beneficial to grade slopes to reduce steepness.
  - e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.
3. Water bar roads where required by this office.

* 2%	Grade	-	200 ft. intervals
2-4%	Grade	-	100 ft. intervals
4-5%	Grade	-	75 ft. intervals
5%	Grade	-	50 ft. intervals

\* Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.
4. Seed roads and pads in the fall (Oct. through mid-Dec.).



IN REPLY REFER TO

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Moab District  
Grand Resource Area  
P.O. Box M  
Moab Utah, 84532

July 15, 1980

### Mmmorandum

To: Oil and Gas Office USGS Conservation Division  
P.O. Box 3768, Grand Junction, Co. 81502  
From: Area Manager, Grand  
Subject: City Service Company  
Fed. D.E. #1, Lease # U-40332  
SWSE Section 20 T. 23 S., R. 18 E. SLB&M  
Grand County, Ut.

On June 27, 1980 a representative from this office met with Glen Doyle, USGS, and Robert Barnes of the City Service Co. for an inspection of the above referenced location. Subject to the attached conditions, I am approving the surface management portion of the Application for Permit to Drill.

The Archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to City Service Co.

Enclosures: (2)  
1-Reclamation Procedures  
2-Seed Mixture

*Gregg R. Lawson*  
ACTING



*Save Energy and You Serve America!*

**JUL 21 REC'D**

ARCHAEOLOGICAL CLEARANCE SURVEY  
OF CITIES SERVICE COMPANY  
NO. 1 FEDERAL D.E. PROPOSED LOCATION  
GRAND COUNTY, UTAH

By  
John E. Bradley  
and  
Clifton Wignall

Prepared For:  
Cities Service Company  
1600 Broadway, Suite 900  
Denver, Colorado 80202

By  
Nickens & Associates  
P.O. Box 727  
Montrose, Colorado 81401

## Summary Report of Inspection for Cultural Resources

Comments:

- UT 8100-3 (4/79)

## INTRODUCTION

Nickens & Associates of Montrose, Colorado, recently completed an archaeological clearance survey of Cities Service Company's proposed No. 1 Federal D.E. and associated access road in Grand County, Utah (S. 20, T.23S, R.18E). The survey was requested by Uintah Engineering, Vernal, Utah, on behalf of Cities Service Company of Denver, Colorado. The fieldwork was conducted by John Bradley, Staff Archaeologist at Nickens & Associates, on April 15, 1980. Mr. Bradley was accompanied by Dr. Clifton Wignall. On 24 April, the location was revisited by Dr. Paul R. Nickens and Kenneth Kvamme, who were nearby in conjunction with other work. The second visit was made to more fully evaluate the recorded presence of prehistoric cultural resource materials at the proposed location. The fieldwork and this report were completed to meet the requirements of applicable historic preservation laws and Executive Order 11593. All work was conducted under provisions of Federal Antiquities Permit No. 80-UT-034, which expires on 4 March 1981.

## Survey Results

The proposed project features (Fig. 1) marked by upright laths were inspected by pedestrian coverage. The proposed well location was found to be free of cultural materials with the exception of a few widely scattered flakes. Away from the pad layout, however, cultural materials, predominantly nondiagnostic flakes, were noted adjacent to sandstone outcrops which flank the location to the northwest and southeast. These evidences were recorded as a single site with two localities and given the number 42GR1005 in the State survey system. A Utah-BLM site form and supporting data are attached to this report.

The site may be classified as a prehistoric lithic scatter with the possibility of rockshelter locations. It seems more probable, though, that shelter was gained by camping proximal to the sandstone outcrops. No features nor cultural depth are evident at either locality, and no diagnostic artifacts were observed. Some quarrying activity is probably present since quartzite nodules and flakes outcrop throughout the area. Many of the flakes, however, are materials of nonlocal origin.

## Recommendations

Site 42GR1005 is not considered to be eligible for nomination to the National Register due to the following reasons:

- (1) A lack of finished, diagnostic tools;
- (2) A lack of cultural features (e.g. hearths, structures, etc.); and
- (3) There is no apparent depth. This is especially true in the vicinity of the proposed location where erosion is extensive.

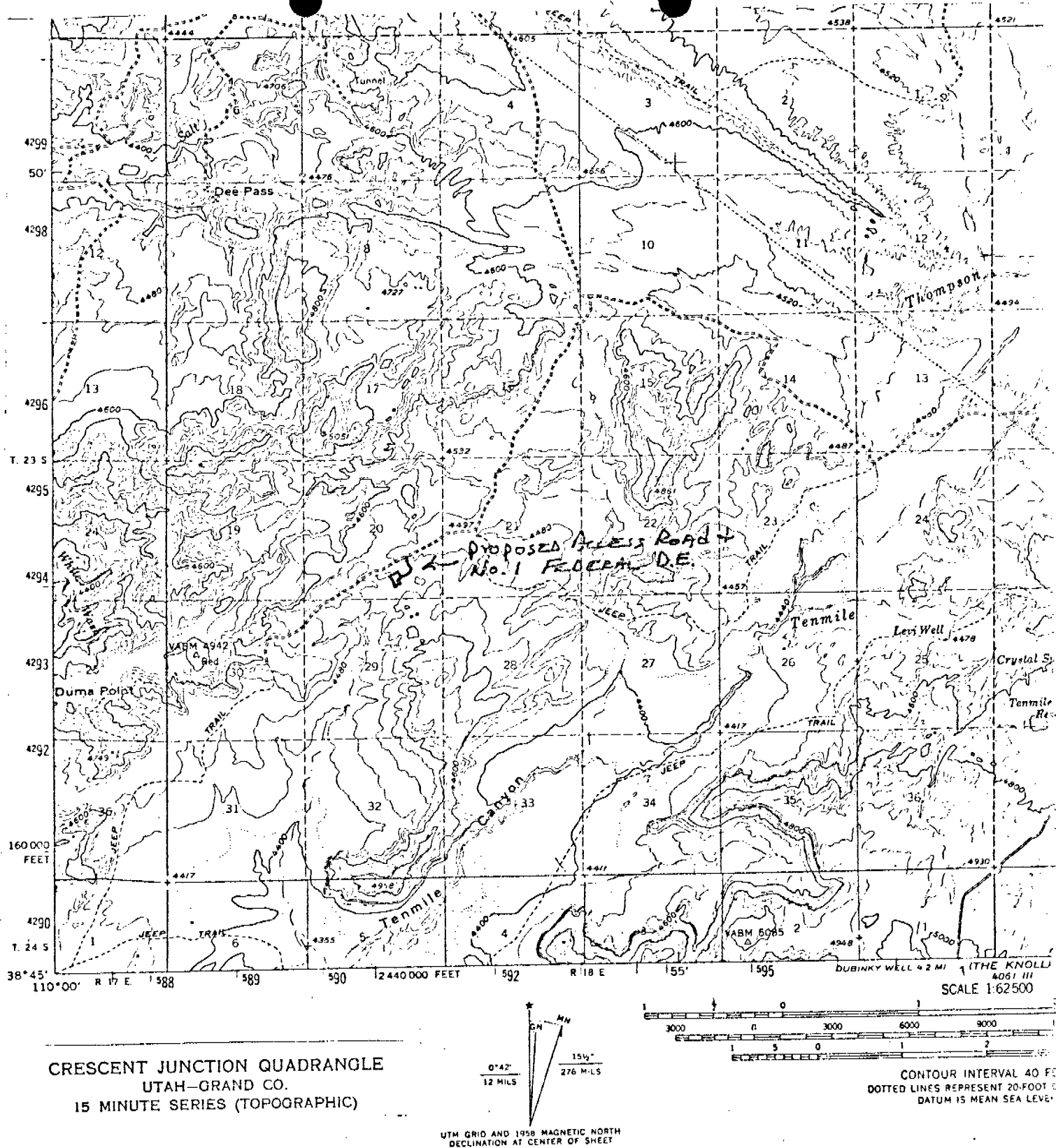


Fig. 1. Location of Cities Service Company proposed location No. 1 Federal D.E. and access road.

Thus, it is recommended that the proponent company be allowed to develop the location at its presently surveyed position. However, it is also recommended that contractors be instructed to refrain from extending construction activities north and south of the proposed layout (Fig. 2). Further, contractors should be made aware that if cultural materials (e.g. artifacts or charcoal concentrations) are encountered during development, construction should be immediately halted and the appropriate BLM office notified before further action is taken.

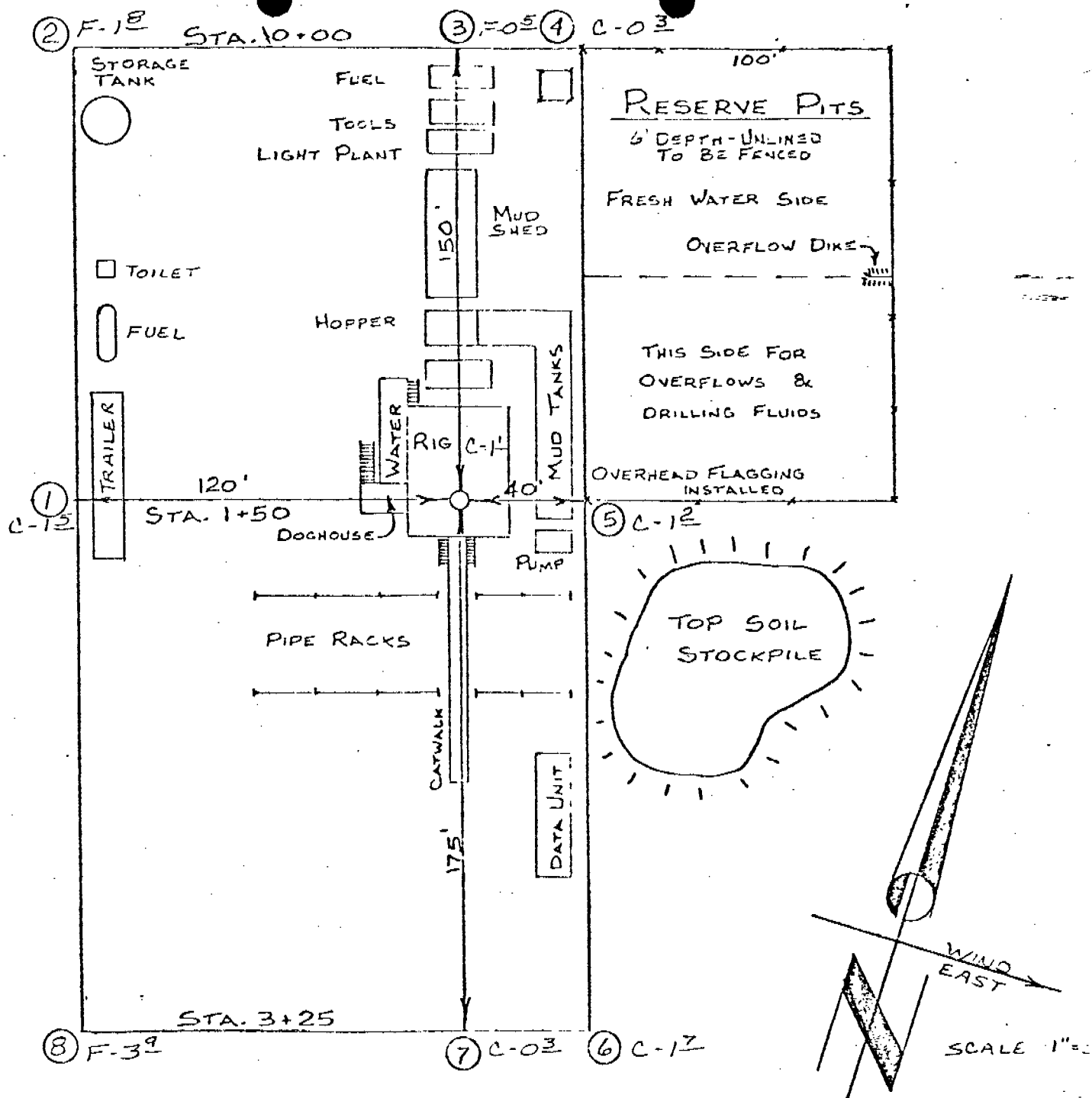
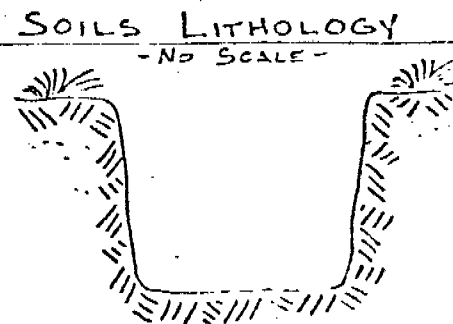


Fig. 2. Surveyors layout of proposed location  
No. 1 Federal D.E.





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
UTAH STATE OFFICE

ANTIQUITIES SITE INVENTORY

1 AGENCY NO. \_\_\_\_\_ 2 STATE NO. 42GR11005  
3 PROJECT NAME \_\_\_\_\_ 4 BLM REPORT ID# \_\_\_\_\_  
5 PREHISTORIC X 8 RECORDED BY J. Bradley  
6 HISTORIC \_\_\_\_\_ 9 INSTITUTION Nickens & Associates  
7 PALEONTOLOGICAL \_\_\_\_\_ 10 DATE April 15, 1980

11 BLM DISTRICT NO. 6 12 BLM RESOURCE AREA G|R

Salt Lake = 2 Cedar City = 4 Vernal = 8  
Richfield = 5 Moab = 6

13 COUNTY Grand

22 23  
BO = Bonneville, WA = Wasatch, HR = House Range, WS = Warm Springs,  
SE = Sevier River, HM = Henry Mtns., BR = Beaver River, DX = Dixie,  
KA = Kanab, ES = Escalante, SJ = San Juan, GR = Grand, PR = Price Riv  
SR = San Rafael, DM = Diamond Mountain, BC = Book Cliffs.

14 UTM GRID: ZONE 12 Easting 590750 Northing 4293800

15 LEGAL DESCRIPTION: T. 12 S. R. 11 E. Sec. 20 Qu-Sec. S|E Qu-Sec. S|W Qu Sec. S|E  
Fill in spaces 43 or 46 only if: 39 42 43 46 47 48 49 50 51 52 53 54  
42 Y = Vernal Meridian 46 H = Half Range  
H = Half Township

16 MAP NAME AND SCALE: U.S.G.S. Crescent Junction, 1:62,500

17 SURFACE OWNER: L|M LM = BLM ST = State PR = Private  
55 56 FS = USFS PS = NPS OT = Other

OTHER: \_\_\_\_\_

18 NATIONAL REGISTER POTENTIAL: N S=Significant, N=Nonsignificant Why: The site has no  
57  
diagnostics nor apparent depth of cultural materials.

19 MANAGEMENT VALUES: Interpretational Potential \_\_\_\_\_ Scientific \_\_\_\_\_

20 SITE CONDITION Surface; eroded % DESTROYED 1  
58 59 60

21 AGENT CAUSING IMPACT E|R 1 1  
ER = Erosion 61 62 63 64 65 66  
VA = Vandalization  
PR = Project  
OT = Other  
NO = No Impact

22 PHOTO TAKEN: Color # \_\_\_\_\_  
Y=Yes B/W # \_\_\_\_\_  
67 N=No

23 RECOMMENDED PROTECTION None

24 SITE TYPE - CULTURAL L|A 1 1 RA=Rock Art, LA=Limited Activity, ST=Structural  
68 69 70 71 72 73 RS=Rock Shelter, OT=Other

25 PALEONTOLOGICAL: Invertebrate \_\_\_\_\_ Vertebrate \_\_\_\_\_ Flora \_\_\_\_\_

26 CULTURAL FEATURES L|S Q|U S|H 1 1 1  
74 75 76 77 78 79 80 81 82 83 84 85 86 87

OT = Other \_\_\_\_\_

LS = Lithic Scatter  
CS = Ceramic Scatter  
GS = Ground Stone Scatter  
HE = Hearth  
QU = Quarry  
BS = Burned Stone  
MO = Midden  
DE = Depression  
OT = Other

SH = Shelter  
RA = Rock Alignment  
RM = Rubble Mound  
SC = Slab-lined cists  
MG = Masonry Granary  
MR = Masonry Rooms/Wall  
TW = Tower  
WC = Water Control  
M7 = More than 7 of the above.

PI = Pictograph  
PE = Petroglyph  
BU = Burial  
MS = Historical Struc  
MN = Mines  
CO = Corral  
TR = Trail  
GL = Glass

Description: The site consists of  
two distinct localities (A and B) of flake scatters, each adjacent to sandstone  
outcrops. The localities are ca. 200 m. apart. Sparse isolated flakes and retouched  
flakes are found between the two areas, see #45.

27 SITE DIMENSIONS: L. 300 (M) Ft. w 160 (M) Ft. Depth 0 (M)

28 DEPTH OF FILL N Y=Yes N=No U=Undetermined

29 CULTURAL PERIOD/AFFILIATION

U N 89 90 91 92 93 94 95 96

PA = Paleo. Indian  
AB = Archaic  
FR = Fremont  
BS = Basketmaker  
OT = Other

PJ = Pueblo/Anasazi  
EA = Euro-American  
UP = Ute-Plute  
NA = Navaho  
UN = Unknown

OT=Other

30 SUB PERIOD =

97 113

31 ARTIFACTS OBSERVED: Lithic ☒ Ceramic ☐ Bone ☐ Metal ☐ Charcoal ☐ Glass ☐

DESCRIPTION

32 SURFACE COLLECTED ☒ Y=Yes, N=No,

114

33 DESCRIPTION OF ARTIFACTS COLLECTED: None

34 CURATORIAL DISPOSITION

35 AVERAGE ARTIFACT DENSITY: .001 Per square meter

36 ENVIRONMENTAL - TOPOGRAPHIC SITUATION

Level Terrain ☐ Cave ☐ Mesa Top ☐ Talus ☐  
Broken Terrain ☒ Slope ☐ Cliff Edge ☐ Other: ☐  
Canyon Bottom ☐ Ridge ☐ Overhang ☐  
Bench/Terrace ☐ Ledge ☒ Rim ☐

37 DIRECTION SITE FACES: Flat ☒

38 GROUND SLOPE

39 ELEVATION OF SITE: 115 119

40 ORIGIN OF SOILS:

41 WATER RESOURCES: Stream ☐ Spring ☐ Seep ☐ Other ☐ None ☐ Perm. ☐ Inter. ☒

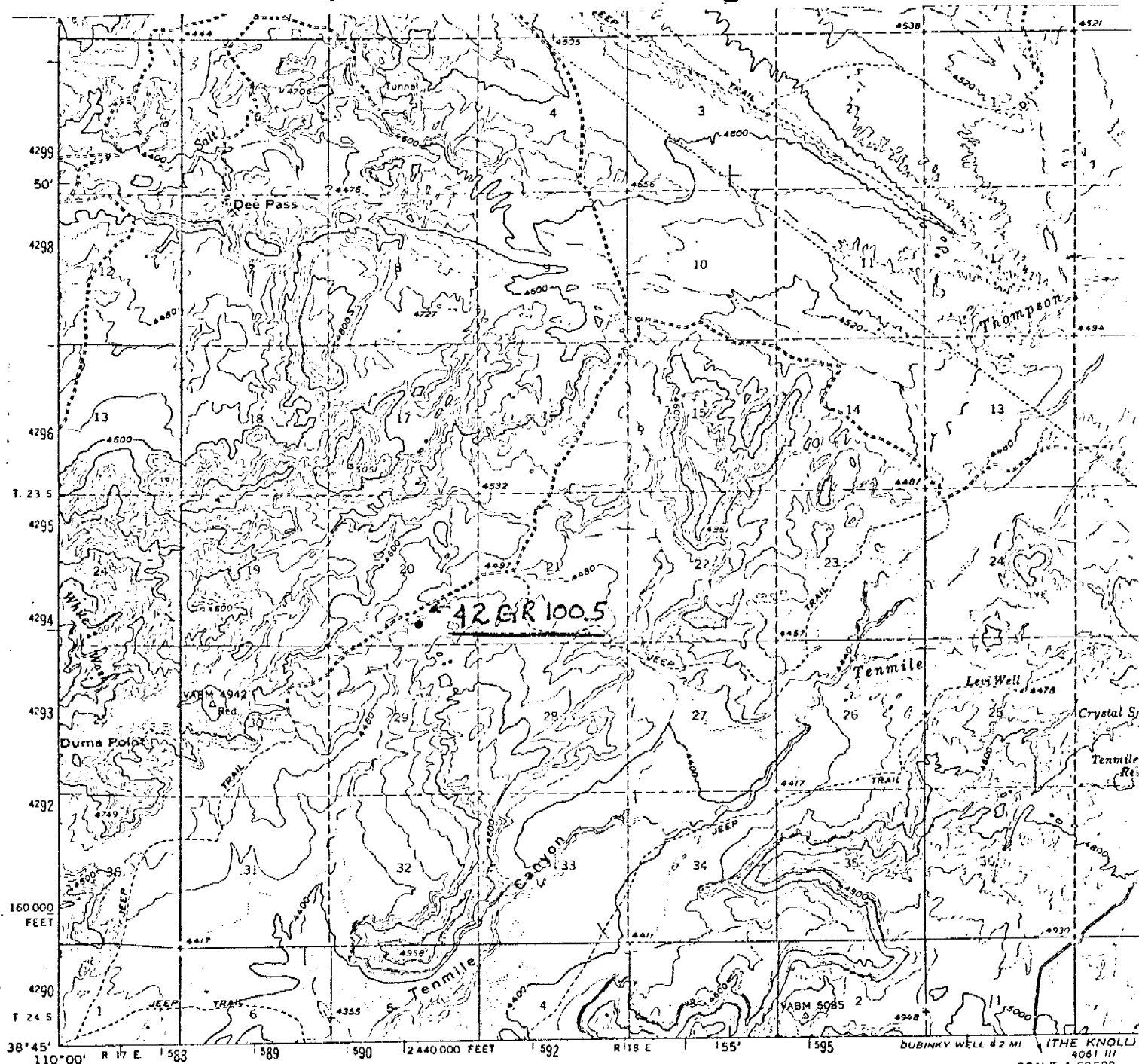
42 NAME OF WATER SOURCE

43 VEGETATION ON SITE: 120 132 Mormon tea, saltbrush, prickly pear

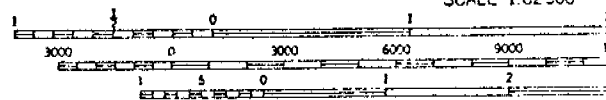
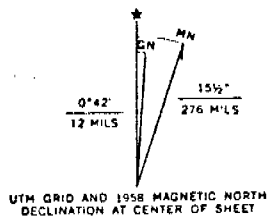
44 VEGETATION SURROUNDING SITE: cactus, grasses

45 DESCRIPTION/REMARKS: #26, continued - probably the result of erosion and subsequent movement of the artifacts from the more sheltered areas. The area between the localities is greatly eroded. No cultural features were noted, and there is no indication of depth of cultural materials throughout the site area. Some quarrying activities are probably indicated since fine-grained quartzite occurs locally in the form of nodules and large flakes. Close scrutiny revealed no diagnostic artifacts.

(Attach sketch map, photos, and xerox of topographic map with T., R., Scale, Quad. name, marked project & survey areas.)

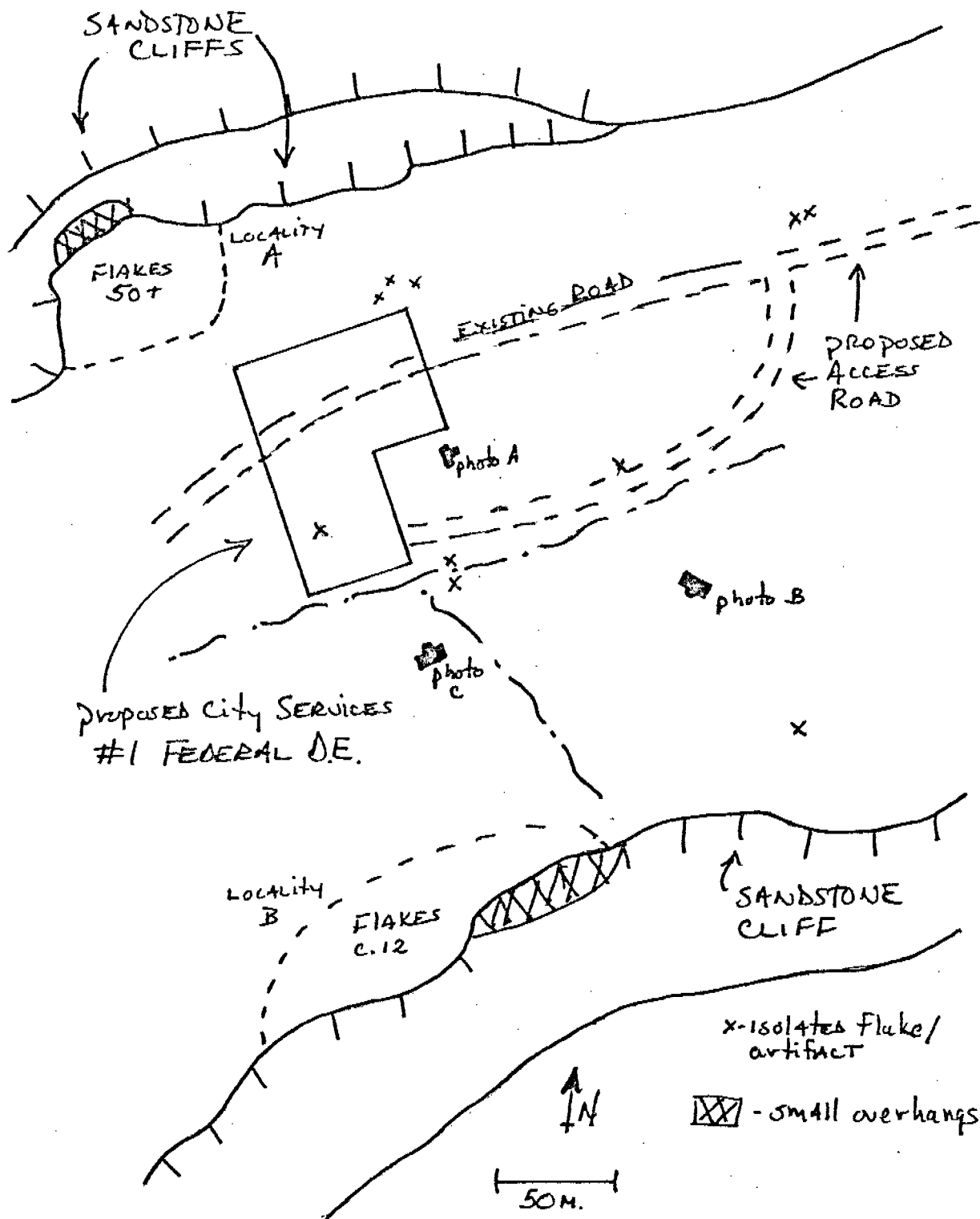


CRESCENT JUNCTION QUADRANGLE  
UTAH-GRAND CO.  
15 MINUTE SERIES (TOPOGRAPHIC)



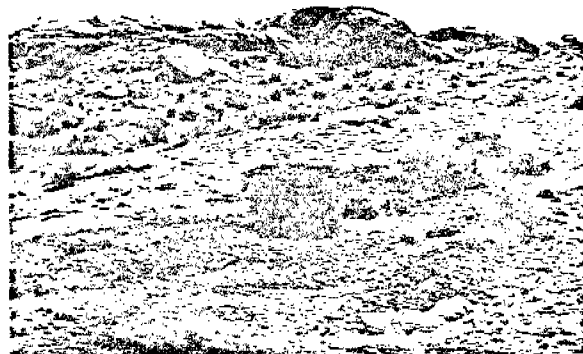
CONTOUR INTERVAL 40 FEET  
DOTTED LINES REPRESENT 20-FOOT C  
DATUM IS MEAN SEA LEVEL

42 GR 1005

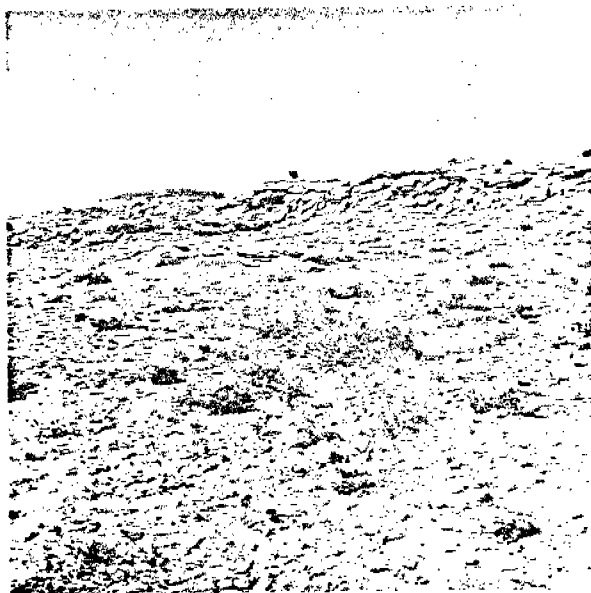




a.



b.



c.

- a. View of access road, looking NE.
- b. View of area southeast of proposed well pad toward vicinity of locality B.
- c. View to west; locality A is situated near sandstone cliffs. The proposed well location is in the foreground.

\*\* FILE NOTATIONS \*\*

DATE: May 19, 1980  
OPERATOR: Cities Service Company  
WELL NO: Federal # DE-1  
Location: Sec. 20 T. 23S R. 18E County: Grand

File Prepared: ☒ Entered on N.I.D: ☒  
Card Indexed: ☒ Completion Sheet: ☒

API Number 43-019-30647

CHECKED BY:

Petroleum Engineer: M. J. Minder 5-23-80

Director: \_\_\_\_\_

Administrative Aide: \_\_\_\_\_

APPROVAL LETTER:

Bond Required: ☐

Survey Plat Required: ☐

Order No. \_\_\_\_\_

O.K. Rule C-3 ☒

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site

Lease Designation Fed

Plotted on Map ☒

Approval Letter Written ☒

Hot Line ☒

P.I. ☒

Wtm

#1

May 28, 1980

Cities Service Company  
1600 Broadway, Suite 900  
Denver, Colorado 80202

Re: Well No. Federal #DE-1, Sec. 20, T. 23S, R. 18E., Grand County, Utah  
Well No. State A #1, Sec. 32, T. 37S, R. 23E., San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer  
Office: 533-5771  
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API numbers assigned to these wells are Federal #DE-1: 43-019-30647;  
State A #1: 43-037-30556.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder  
Petroleum Engineer

/b:tm

cc: USGS  
Donald Prince  
Cities Service Company - Midland Texas

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUBMIT TRIPLICATE\*  
(Other instructions on  
reverse side)

# SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-40332
2. NAME OF OPERATOR Cities Service Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1600 Broadway, Suite 900, Denver, Colorado 80202		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 574' FSL and 1895' FEL		8. FARM OR LEASE NAME Federal DE
14. PERMIT NO. 43-019-30647		9. WELL NO. 1
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 4544' GR		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 20-T23S-R18E SLB & M
		12. COUNTY OR PARISH Grand
		13. STATE Utah

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

### NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐

FULL OR ALTER CASING

☐  
☐  
☐  
☒

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

### SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Intent to:

Set 160 sx salt saturated Class "G" plug above fish at 9123'-8770'+. Sidetrack old wellbore and fish and start drilling with Dyna-drill.

APPROVED BY THE DIVISION  
OF OIL GAS, AND MINING

DATE: 11/20/80

BY: W. J. Goode

18. I hereby certify that the foregoing is true and correct

SIGNED W. J. Goode

TITLE Engineer

DATE 11/13/80

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



Contractor Empire Drlg.  
Rig No. 5  
Spot SW-SE  
Sec. 20  
Twp. 23 S  
Rng. 18 E  
Field Wildcat  
County Grand  
State Utah  
Elevation 4558' K.B.  
Formation --

Top Choke 1/4"  
Bottom Choke 3/4"  
Size Hole 8 3/4"  
Size Rat Hole --  
Size & Wt. D. P. 4 1/2" 16.60  
Size Wt. Pipe --  
I. D. of D. C. 2 1/4"  
Length of D. C. --  
Total Depth 7543'  
Interval Tested 7498-7543'  
Type of Test Bottom Hole  
Inflate

Flow No. 1 15 Min.  
Shut-in No. 1 30 Min.  
Flow No. 2 50 Min.  
Shut-in No. 2 100 Min.  
Flow No. 3 -- Min.  
Shut-in No. 3 -- Min.

Bottom  
Hole Temp. 156°  
Mud Weight 11.5  
Gravity --  
Viscosity 41

Tool opened @ 11:07 AM

**Outside Recorder**

PRD Make Kuster K-3  
No. 18330 Cap. 9000 @ 7509'

	Press	Corrected
Initial Hydrostatic	A	4489
Final Hydrostatic	K	4451
Initial Flow	B	947
Final Initial Flow	C	1045
Initial Shut-in	D	1648
Second Initial Flow	E	897
Second Final Flow	F	885
Second Shut-in	G	1246
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.  
Our Tester: Charles Tuzicka  
Witnessed By: Frank Boswell

Did Well Flow -- Gas Yes Oil No Water No  
RECOVERY IN PIPE: 620' Gas cut drilling mud

**Blow Description:**

1st Flow: Tool opened with a strong blow, increased to bottom of bucket in 15 seconds and continued to increase to 90 psi. at end of flow period.

2nd Flow: Tool opened with gas to surface, see Gas Volume Report.

Operator Cities Service Co.  
Address 1600 Broadway, Suite 900  
Denver, Colorado 80202

Well Name and No. Federal D.E. #1  
Ticket No. 20812

Date 10-26-80

DST No. 1  
No. Final Copies 5

# LYNES, INC.

Operator Cities Service Co. Lease & No. Federal D.E. #1 DST No. 1

---

## First Flow

0 - 947	9 - 1072
3 - 966	12 - 1076
6 - 1064	15 - 1045

## Second Flow

0 - 897	27 - 840
3 - 905	30 - 840
6 - 885	33 - 844
9 - 905	36 - 844
12 - 893	39 - 847
15 - 859	42 - 855
18 - 844	45 - 866
21 - 836	48 - 878
24 - 836	51 - 885

WELL NAME: FEDERAL D.E. 1

DST NUMBER: 001

RECORDER NUMBER: 018330

INTERVAL TESTED: 7498FT TO 7543FT

RECORDER DEPTH: 7509.001FT

TOTAL FLOW TIME: 15.0MIN

FIRST SHUT IN PRESSURE (GAS)

TIME (MIN)	(T+PHI)	PRESSURE	PRESSURE
PHI	/PHI	(PSI)	(PSI <sup>2</sup> )/10 <sup>6</sup>
.0	.0000	1045.0	1.09202
3.0	6.0000	1284.0	1.64866
6.0	3.5000	1364.0	1.86050
9.0	2.6667	1432.0	2.05062
12.0	2.2500	1477.0	2.18153
15.0	2.0000	1519.0	2.30736
18.0	1.8333	1549.0	2.39940
21.0	1.7143	1580.0	2.49640
24.0	1.6250	1610.0	2.59210
27.0	1.5556	1633.0	2.66669
30.0	1.5000	1648.0	2.71590

The initial shut-in pressure build-up curve has insufficient character to permit the use of a Horner plot to determine reliable extrapolated shut-in pressure.

WELL NAME: FEDERAL D.E. 1

DST NUMBER: 001

RECORDER NUMBER: 018330

INTERVAL TESTED: 7498FT TO 7543FT

RECORDER DEPTH: 7509.001FT

TOTAL FLOW TIME: 65.0MIN

SECOND SHUT IN PRESSURE (GAS)

TIME (MIN)	(T+PHI)	PRESSURE	PRESSURE
PHI	/PHI	(PSI)	(PSI <sup>2</sup> )/10 <sup>6</sup>
.0	.0000	885.0	.78322
3.0	22.6667	950.0	.90250
6.0	11.8333	977.0	.95453
9.0	8.2222	996.0	.99202
12.0	6.4167	1015.0	1.03022
15.0	5.3333	1027.0	1.05473
18.0	4.6111	1042.0	1.08576
21.0	4.0952	1053.0	1.10881
24.0	3.7083	1064.0	1.13210
27.0	3.4074	1076.0	1.15778
30.0	3.1667	1083.0	1.17289
33.0	2.9697	1098.0	1.20560
36.0	2.8056	1106.0	1.22324
39.0	2.6667	1114.0	1.24100
42.0	2.5476	1125.0	1.26562
45.0	2.4444	1133.0	1.28369
48.0	2.3542	1140.0	1.29960
51.0	2.2745	1148.0	1.31790
54.0	2.2037	1155.0	1.33402
57.0	2.1404	1163.0	1.35257
60.0	2.0833	1170.0	1.36890
63.0	2.0317	1174.0	1.37828
66.0	1.9848	1182.0	1.39712
69.0	1.9420	1189.0	1.41372
72.0	1.9028	1197.0	1.43281
75.0	1.8667	1201.0	1.44240
78.0	1.8333	1208.0	1.45926
81.0	1.8025	1212.0	1.46894
84.0	1.7738	1220.0	1.48840
87.0	1.7471	1227.0	1.50553 *
90.0	1.7222	1232.0	1.51782 *
93.0	1.6989	1237.0	1.53017 *
96.0	1.6771	1242.0	1.54256 *
100.0	1.6500	1246.0	1.55252 *

\* VALUES USED IN HORNER ANALYSIS

SLOPE: 1.93421 (PSI<sup>2</sup>/10<sup>6</sup>)/CYCLE

EXTRAPOLATED PRESSURE: 1405.3 PSI

# HORNER PLOT

TEST DATE: 10 26 80

WELL NAME: FEDERAL D.E. 1

LOCATION:

DST-NO: 001

REC-NO:

018330

SHUT-IN:

EXTRAPOLATED PRESSURE:

SLOPE:

$t_i$ :

15.0 MIN

PRESSURE PSI<sup>2</sup>/10<sup>6</sup> GAS

100

50

25

TIME  $(t + \Delta t) / \Delta t$

10

5

2.5

1

2

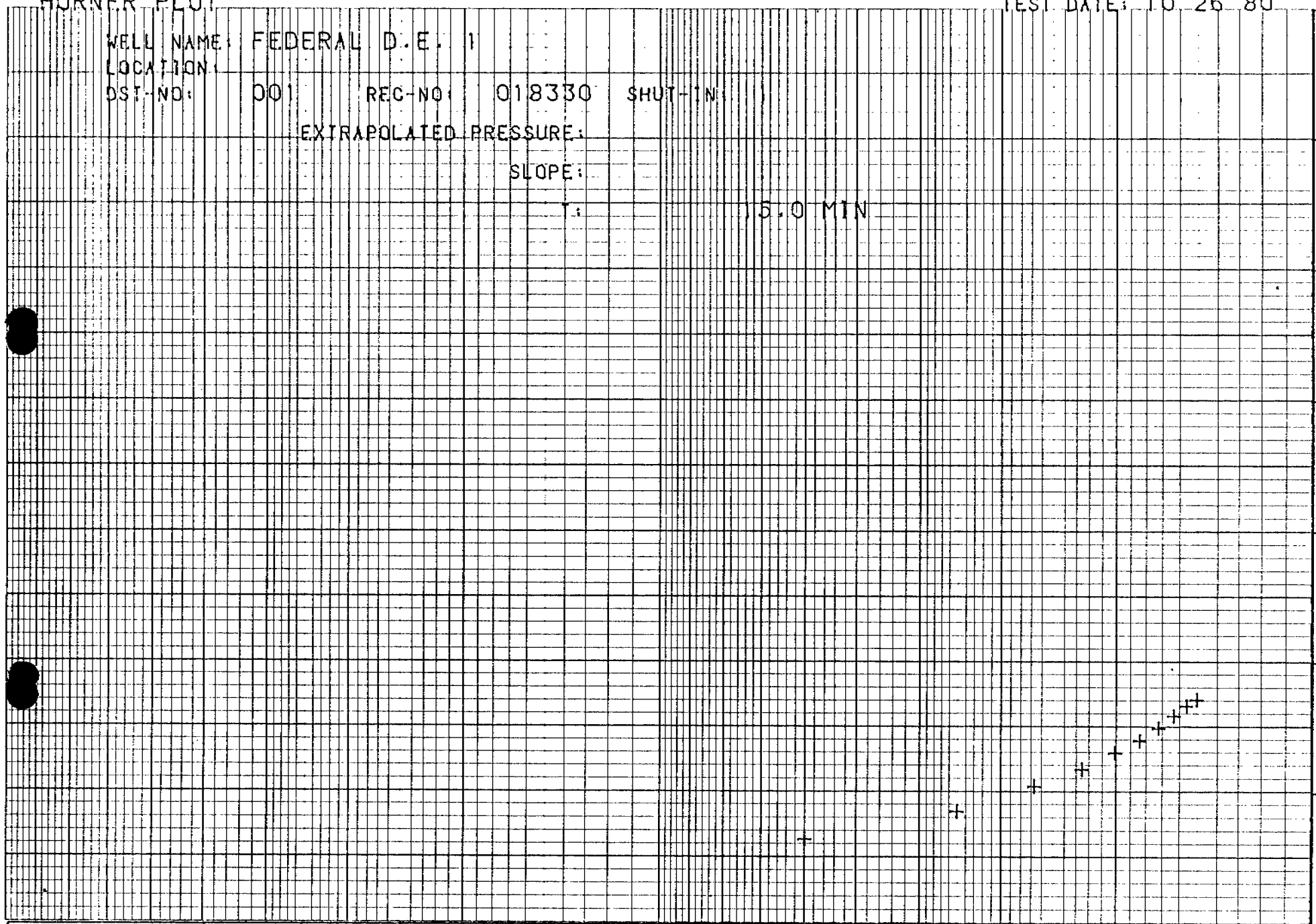
3

4

5

6

7



# HORNER PLOT

TEST DATE: 10 26 80

WELL NAME: FEDERAL D.E. 1

LOCATION:

DST-NO: 001

REC-NO:

018330

SHUT-IN: 2

EXTRAPOLATED PRESSURE:

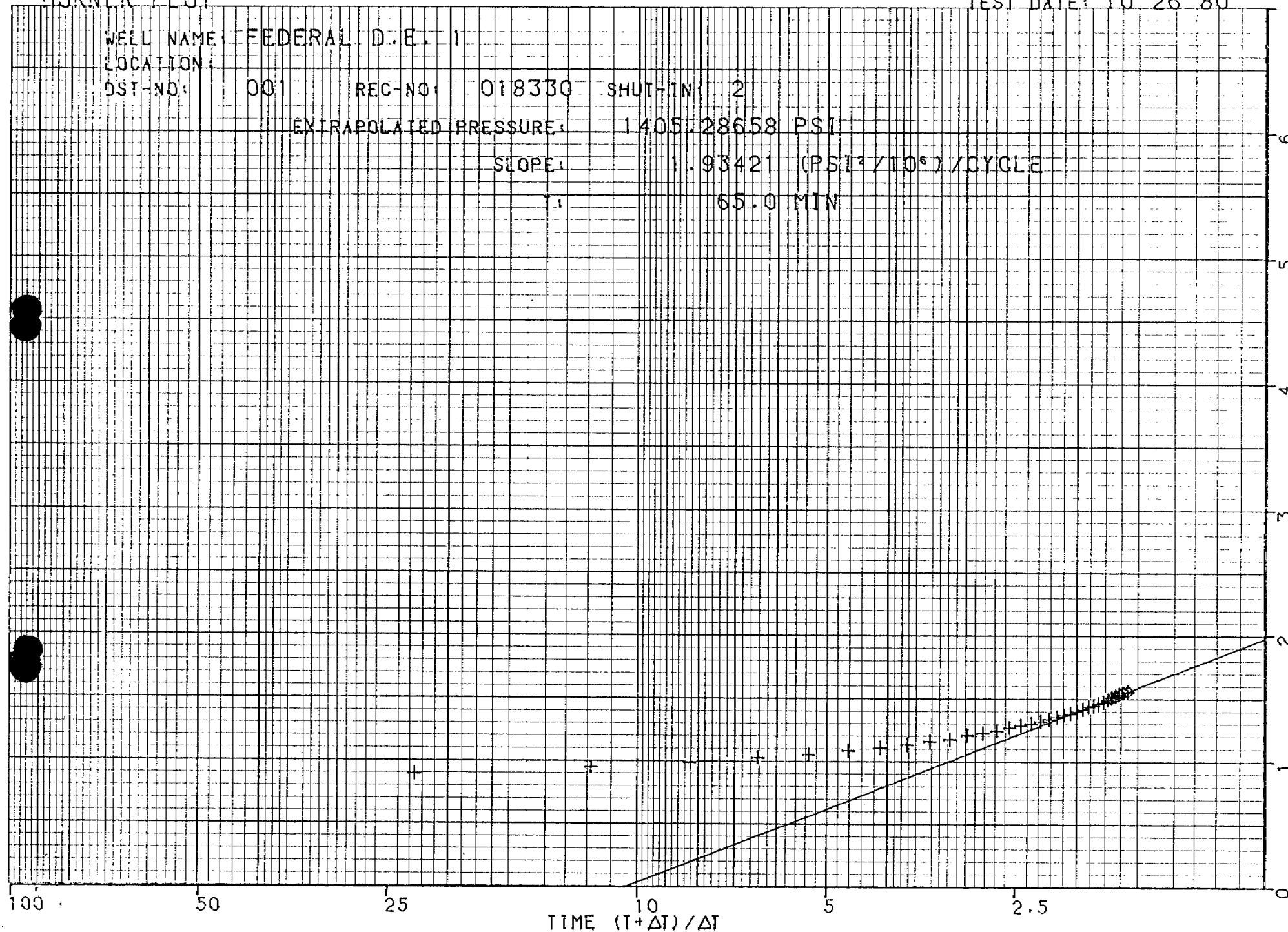
1405.28658 PSI

SLOPE:

1.93421 (PSI<sup>2</sup>/10<sup>6</sup>)/CYCLE

65.0 MIN

PRESSURE PSI<sup>2</sup>/10<sup>6</sup> GAS



**LYNES, INC.**

## Gas Volume Report

Cities Service Co.

Operator

Federal-D.E. #1

Well Name and No.

1

DST No.

Second Flow:

[illegible]

Remarks:

# LYNES, INC.

## Sampler Report

Company Cities Service Co. Date 10-26-80  
Well Name & No. Federal D.E. #1 Ticket No. 20812  
County Grand State Utah  
Test Interval 7498-7543' DST No. 1

Total Volume of Sampler: 2150 cc.

Total Volume of Sample: 2150 cc.

Pressure in Sampler: 30 psig

Oil: None cc.

Water: None cc.

Mud: None cc.

Gas: .2 cu. ft.

Other: 2150 Black Shale

### Resistivity

Make Up Water \_\_\_\_\_ @ \_\_\_\_\_ of Chloride Content \_\_\_\_\_ ppm.

Mud Pit Sample \_\_\_\_\_ @ \_\_\_\_\_ of Chloride Content \_\_\_\_\_ ppm.

Gas/Oil Ratio \_\_\_\_\_ Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F

Where was sample drained On location

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

November 13, 1980

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202

(303) 861-2464

RECEIVED

NOV 17 1980

UNION OF  
OIL, GAS & MINING

State of Utah  
Department of Natural Resources  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

ATTN: Mr. Michael T. Minder

RE: Cities Service Company  
Federal DE #1  
SW-SE Section 20-T23S-R18E  
Grand County, Utah

Dear Mr. Minder:

Please find enclosed three (3) copies of Form OGC-1b, "Sundry Notices and Reports on Wells", on the above referenced well.

Cities Service Company proposes to set a cement plug above the top of the fish at 9123' and sidetrack the old wellbore and fish. If you have any questions concerning this information, please contact this office.

Sincerely,

W.J. Gooden  
Engineer  
Western Region

WJG/nrm  
Enclosures



CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

December 4, 1980

State of Utah  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

ATTN: Mr. Cleon B. Freight

RE: Cities Service Company  
Federal DE-1  
Section 20-T23S-R18E  
Grand County, Utah  
Federal Lease # U-40332

Dear Sir:

Enclosed are three (3) copies of Form 9-331, "Sundry Notices and Reports on Wells", for our Federal DE-1. This is a progress report on our well, which includes spud date and current depth.

If you have any questions concerning this well, please contact this office.

Sincerely,

George H. Baer  
Region Petroleum Engineer  
Western Region

GB/nrm  
Enclosures

**RECEIVED**

DEC 12 1980

DIVISION OF  
OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐

2. NAME OF OPERATOR  
CITIES SERVICE COMPANY

3. ADDRESS OF OPERATOR  
1600 Broadway, Suite 900, Denver, CO 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 574' FSL & 1895' FEL  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) Progress Report			

5. LEASE  
U-40332

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Federal DE

9. WELL NO.  
1

10. FIELD OR WILDCAT NAME  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 20-T23S-R18E SLB&M

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.  
43-019-30647

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4544' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

9-18-80 Spudded 12- $\frac{1}{4}$ " hole at 10:15 p.m.  
Total Depth: 9596' - Top of fish: 9123'

11-16-80 Spot cement plug and prepare to sidetrack fish. Pumped 200 sx  
Dowell Class "B" salt saturated cement.

11-17-80 Tag cement at 8472'. Drill cement to 8494'.

11-21-80 Start to sidetrack.

12-03-80 Total Depth: 9376' - Drilling

RECEIVED

DEC 1 1980

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct.

SIGNED George H. Baer TITLE Region Petroleum Engineer DATE December 4, 1980

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

January 7, 1981

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

ATTN: M.T. Minder

RE: Cities Service Company  
Federal DE #1  
SW SE Section 20-T23S-R18E  
Grand County, Utah

Dear Sir:

Please find enclosed three (3) copies each of U.S.G.S. Form 9-331, "Sundry Notices and Reports on Wells: Request For Approval To and Subsequent Report Of", for the above referenced well.

If you have any questions concerning this information, please contact this office.

**RECEIVED**

JAN 12 1981

DIVISION OF  
OIL, GAS & MINING

JRV/RJM/nrm  
Enclosures

Sincerely,

*James R. Vaughan*

James R. Vaughan  
Region Engineering Manager  
Western Region

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

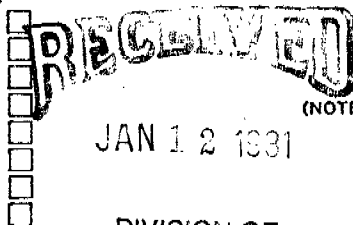
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐
2. NAME OF OPERATOR  
Cities Service Company
3. ADDRESS OF OPERATOR  
1600 Broadway, Suite 900, Denver, CO 80202
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 574' FSL & 1895' FEL (SW SE)  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) Change Plans

SUBSEQUENT REPORT OF:



(NOTE: Report results of multiple completion or zone change on Form 9-330.)

DIVISION OF  
OIL, GAS & MINING

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Request for Approval To:

Plug back 8-3/4" hole with 60 sxs of salt saturated Class "B" cement with 3.3% D-13 retarder at interval 10,150'-10,300' and drill stem test interval 10,080'-10,095' for evaluation, per verbal approval received January 7, 1981 by E.W. Guynn.

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE: 1-19-81

BY: M. J. [Signature]

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Engineering Manager DATE January 7, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐
2. NAME OF OPERATOR  
Cities Service Company
3. ADDRESS OF OPERATOR  
1600 Broadway, Suite 900, Denver, CO 80202
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 574' FSL & 1895' FEL (SW SE)  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) Change Plans

SUBSEQUENT REPORT OF:

**RECEIVED**

JAN 12 1981

DIVISION OF  
OIL, GAS & MINING

5. LEASE  
U-40332
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A
7. UNIT AGREEMENT NAME  
N/A
8. FARM OR LEASE NAME  
Federal DE
9. WELL NO.  
1
10. FIELD OR WILDCAT NAME  
Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 20-T23S-R18E SLB & M
12. COUNTY OR PARISH Grand 13. STATE Utah
14. API NO.  
43-019-30647
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4544' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Subsequent Report Of:

Plugged back 8-3/4" hole with 60 sxs of salt saturated Class "B" cement with 3.3% D-13 retarder at interval 10,150'-10,300' and drill stem tested interval 10,080'-10,095' per verbal approval received January 7, 1981 by E.W. Guynn.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct.

SIGNED James L. Vaughan TITLE Engineering Manager DATE January 7, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

## CITIES SERVICE COMPANY

## Daily Well History - Initial Report

INSTRUCTIONS: Submit an Initial Report as soon as possible after spudding. Complete applicable data and begin in the appropriate space a daily chronological record of drilling activity. Daily work prior to spudding should be summarized giving inclusive dates only. Include in the Initial Report the exact surface location of the drill site and if the well is directionally drilled, also report bottom hole location at projected TD. Description of work performed on the Initial Report after spud date should be a complete report of each days Drilling Activity. Significant workovers may also be recorded on an Initial Report.

LEASE/ UNIT NAME & WELL NO. Federal "DE" #1		OPERATOR Cities Service Company		REGION Western	
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah		FIELD OR PROSPECT NAME Ten Mile		AFE NUMBER **	APPRO. NO. 01P8001
PROJECTED TD & DEEPEST OBJECTIVE FORMATION 10,500' Mc Cracken		SEC. REC. PROJECT NO. -----		PRODUCING COST CENTER IF ASSIGNED -----	
SPUD DATE 9-18-80	ELEVATION KB GL	DEPTH OF WATER -----	OFFSHORE GROUP -----	API WELL NUMBER 43-019-30647	
ORIGINAL 100% COST ESTIMATE	DRILLING CONTRACTOR Empire Drilling Co.	ORLG. COST INTEREST IF DIFFERENT FROM GROSS WI		CO. GROSS WI 100%	NET REV. INT 78.50 %

## SURFACE LOCATION

SW SE Sec. 20-23S-18E

\*\* No AFE # assigned at time of spud.

DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED
9-19-80	<p>1 day Present Depth: 165' 118' 7-1/2 hours Present Operation: Drilling Mud wt. 8.4, vis 29 Survey: 3/4 degrees at 127' PP 700 psi, 60 rpm, wt. on bit 15,000# Bit #1: 12-1/4" Reed Y-21 (634634) 47/165/118/7 1/2/Inc Rigging up 16-1/4 Drilling 7-1/2 RS 1/4 Spudded 12-1/4" hole at 10:15 p.m. on 9-18-80. Location staked 574' FSL &amp; 1985' FEL Section 20-T23S-R18E, Grand County, Utah on 3-27-80 by Uintah Engineering, Vernal, Utah. Elevation 4544' G.L. Proposed TD 10,500'. Mississippian carbonates wildcat. Drilling contractor: Empire Drilling Company.</p>
9-20-80	<p>2 days Present Depth: 730' 612' 20-1/2 hours Present Operation: Drilling Mud wt.: Water Survey: 1/2 degree at 220', 1/4 degree at 385', 3/4 degree at 561' PP 750 psi, 90 rpm, wt. on bit 30,000# Bit #1: 12-1/4" Reed Y21 47/683/28-3/4/Inc Drilling 21-1/4 Survey 1-3/4 RS 3/4 RR 1/4</p>

## CITIES SERVICE COMPANY

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## Daily Well History - Interim Report

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY-PARISH-STATE-PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
9-21-80	<p>3 days  Present Depth: 1246' 516' 16-1/2 hours  Present Operation: Drilling  Mud: Water 8.8, vis 32  Survey: 1-1/4 degrees at 875'  PP 1000 psi, 60 rpm, wt. on bit 35,000#  Bit #1: 12-1/4" Reed Y21 47/875/828/34 1/4  Bit #2: 12-1/4" STC F-2 (AV3986) 875/371/11/Inc  Drilling 16-1/2 Circulate 1-1/2  Trip 1-3/4 SR 1/2  Clean pits 3-3/4</p>	
9-22-80	<p>4 days  Present Depth: 1513'  Present Operation: TIH w/9-5/8" spear  Mud wt. 8.8, vis 37, w.l. 18, ck 3/32, pH 8.5, solids 3-1/2%  Survey: None  PP 1000 psi, 60 rpm, wt. on bit 35,000#  Bit #2: 12-1/4" STC F-2 875/1513/638/19 1/2  Drilling 8-1/2 RS 1/4  Circulate 2-1/4 Short trip 3/4  Circulate 1 TOOH 3/4  Lay down BHA 1 Rig up casing crew 2-1/4  Wait on fishing tools (Dropped 12 jts (473') 9-5/8" csg in hole) 6  Rig up 9-5/8" casing 1</p>	
9-23-80	<p>5 days  Present Depth: 1513'  Present Operation: WOC  Mud wt. 8.8, vis 37  Survey: None  Pickup fishing tools 1 TIH 4  Catch fish and TOOH w/same Rig down Acme tools 1  Lay down 12 jts., 9-5/8" casing 2  Pickup BHA 1-3/4 RS 1/4  Circulate and wait on new casing 3 TOOH 3/4  Rig up and run 9-5/8" casing 3 Circulate 1/4  Cement 9-5/8" casing 1-1/4 WOC 5-3/4  Ran 38 jts., 9-5/8", 36#, K-55, LTC and STC casing (5 LT&amp;C, 33 ST&amp;C) 1520' set @ 1515'. Cemented w/500 sx 50/50 pozmix, 2% gel, 2% CaCl<sub>2</sub> and 1/4# LCM/sx followed w/250 sx Class "B" w/2% CaCl<sub>2</sub> and 1/4# LCM/sx. Good circulation thru out. Cement circulated to surface. Plug down @ 12:15 A.M., 9-23-80.</p>	



## CITIES SERVICE COMPANY

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## Daily Well History - Interim Report

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

WELL UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	WELL NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
9-24-80	6 days Present Depth: 1513' Present Operation: Nipple up BOP's Mud wt. 8.8, vis 37 Wait on BOPE 7 Weld on casinghead. Test weld to 1000 psi. 5 Nipple up BOP's 12	
9-25-80	7 days Present Depth: 1513' Present Operation: Shut down - no crews. Mud wt. 8.8, vis 37 Waiting on parts and nipple up BOP's 9 Shut down - no crews 15	
9-26-80	8 days Present Depth: 1513' Present Operation: Waiting on crews. Mud wt. Water Survey: None Waiting on crews 24	
9-27-80	9 days Present Depth: 1513' Present Operation: Waiting on crews. Mud: Water Survey: None Waiting on crews 24	
9-28-80	10 days Present Depth: 1883' 370' 14-1/4 hours Present Operation: Drilling Mud wt. 8.4, vis 31 Survey: 1-1/2 degrees at 1500' PP 1000 psi, 55 rpm, wt. on bit 30,000# Bit #3: 8-3/4" HTC J-22 (CW362) 1513/1883/370/14 1/4/Inc RR 1 Nipple up BOP's 1 Test BOP's 1-1/4 (Test blind & pipe rams to 1500 psi. Test Hydril to 800 psi.) Pick up BHA 3-1/4 Drilling cement & shoe 2 Survey 1/2 RS 3/4 Drilling 14-1/2	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

WELL UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY-PARISH-STATE-PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	WELL NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
9-29-80	11 days Present Depth: 2521' 634' 23-1/4 hours Present Operation: Drilling Mud wt. 8.8, vis 34 Survey: None PP 1100 psi, 50 rpm, wt. on bit 35,000# Bit #3: 8-3/4" HTC J-22 1513/2521/1008/37 1/2 Inc Drilling 23-1/4 RS 1/2 Check BOP 1/4	
9-30-80	12 days Present Depth: 2775' 254' 11 hours Present Operation: Trip with core barrel. Mud wt. 8.8, vis 35, w.l. 18, ck 3/32, pH 11.0, solids 3% PP 1200 psi, 50-60 rpm, wt. on bit 35-38,000# Bit #3: 8-3/4" HTC J-22 1513/2775/1262/48 1/2 Drilling 11 SR 1/2 RR 2-3/4 Circulate & condition hole 2-1/4 Trip out 4 Pick up core bbl & trip in 4-3/4	
10-1-80	13 days Present Depth: 2836' 61' 10-1/2 hours Present Operation: Drilling Mud wt. 8.9, vis 36, w.l. 18, ck 2/32, pH 11.0, solids 4.0% Surveys: 1 degree at 2778', 3/4 degree at 2803' PP 900 psi, 60 rpm, wt. on bit 25-28,000# Bit #4: 8-3/4" Christensen MC20 2775/2803/28/6 Core #1 2775-2803' Cut 28' - recovered 26-1/2' Drilling 4-1/2 Coring 6 Trips 4-1/2 Circulate 5 Remove core and lay down bbl 4	
10-2-80	14 days Present Depth: 3024' 188' 23-1/4 hours Present Operation: Drilling Mud wt. 8.9, vis 34, w.l. 11.0, ck 2/32, pH 10.0, solids 3% PP 850 psi, 55 rpm, wt. on bit 40,000# Bit #5: 8-3/4" Reed FP53A 2803/221/27-3/4 Drilling 23-1/4 RS 3/4	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	WELL NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-3-80	15 days Present Depth: 3250' 226' 21-1/2 hours Present Operation: Drilling Mud wt. 8.7, vis 34, w.l. 16, ck 1/32, pH 10.0, solids 2.5% PP 900 psi, 55 rpm, wt. on bit 40,000# Bit #5: 8-3/4" Reed FP53A 2803/447/49 1/4/Inc Drilling 21-1/2 RS 1/2 RR 2	
10-4-80	16 days Present Depth: 3434' 184' 22 hours Present Operation: Drilling Mud wt. 8.8, vis 34, w.l. 15.0, ck 2/32, pH 10.0, solids 2.5% PP 950 psi, 55 rpm, wt. on bit 40,000# Bit #5: 8-3/4" Reed FP53A 2803/631/71 1/4/Inc Drilling 22 RS 3/4 Clean pits 1-1/4	
10-5-80	17 days Present Depth: 3635' 201' 14-1/2 hours Present Operation: Drilling Mud wt. 8.8, vis 34, w.l. 23, ck 2/32, pH 10.0, solids 3% PP 1200 psi, 50 rpm, wt. on bit 45,000# Survey: 1/2 degree at 3461' Bit #5: 8-3/4" Reed FP53A 2803/3461/658/74-3/4 Bit #6: 8-3/4" HTC J-33 (EH759) 3461/174/11/Inc Drilling 14-1/2 Trip 5-1/2 Survey 1/2 Ream to bottom 2-1/2 RR 1/2 RS 1/2	
10-6-80	18 days Present Depth: 4000' 265' 23-1/4 hours Present Operation: Drilling Mud wt. 8.8, vis 33, w.l. 16.0, ck 2/32, pH 10.0, solids 2.5% PP 1100 psi, 58 rpm, wt. on bit 40,000# Bit #6: 8-3/4" HTC J-33 3461/539/34 1/4 Drilling 23-1/4 RS 3/4	
10-7-80	19 days Present Depth: 4302' 302' 21-1/2 hours Present Operation: Drilling Mud wt. 8.8, vis 34, w.l. 22, ck 2/32, pH 10.5, solids 3% PP 1100 psi, 58 rpm, wt. on bit 44,000# Bit #6: 8-3/4" HTC J-33 3461/841/55-3/4/Inc Drilling 21-1/2 RS 3/4 RR 1-3/4	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-8-80	20 days Present Depth: 4603' 301' 23-1/2 hours Present Operation: Drilling Mud wt. 8.9, vis 36, w.l. 20, ck 2/32, pH 10, solids 3% PP 1150 psi, 58 rpm, wt. on bit 44,000# Bit #6: 8-3/4" HTC J-33 3461/1142/79 1/4/Inc Drilling 23-1/2 RS 1/2	
10-9-80	21 days Present Depth: 4903' 300' 23-1/2 hours Present Operation: Drilling Mud wt. 9.0, vis 30, w.l. 20, ck 2/32, pH 10.0, solids 3% PP 1100 psi, 58 rpm, wt. on bit 45,000# Bit #6: 8-3/4" HTC J-33 3461/1442/102-3/4/Inc Drilling 23-1/2 RS 1/2	
10-10-80	22 days Present Depth: 5085' 182' 16-3/4 hours Present Operation: Trip Mud wt. 9.8, vis 35, w.l. 17, ck 2/32, pH 9.0, solids 4% PP 1100 psi, 60 rpm, wt. on bit 45,000# Bit #6: J-33 3461/5085/1624/119 1/2 Magnaflux drill collars 4-1/2 Drilling 16-3/4 RS 1/2 Trip 2-1/4	
10-11-80	23 days Present Depth: 5277' 192' 17-1/4 hours Present Operation: Drilling Mud wt. 9.7, vis 36, w.l. 16, ck 2/32, pH 8.5, solids 3.5%, cl <sub>2</sub> 140,000 Survey: 1-1/2 degrees at 5085' PP 1200 psi, 60 rpm, wt. on bit 35,000# Bit #7: 8-3/4" Reed HS-51J (631405) 5085/5277/192/17 Magnaflux 3 Check blind and pipe rams 1/4 TIH and change BHA 3-1/4 Drilling 17-1/4 RS 1/4	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	AFE NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-12-80	<p>24 days  Present Depth: 5405' 128' 21-1/2 hours  Present Operation: Drilling  Mud wt. 9.9, vis 34, w.l. 18, ck 2/32, pH 9.0, solids 7%,  cl<sub>2</sub> 90,000  Survey: None  PP 1200 psi, 58 rpm, wt. on bit 40,000#  Bit #7: 8-3/4" Reed HS-51 5085/5405/320/38-3/4/Inc  Drilling 21-1/2 RS 1/2 RR 2</p>	
10-13-80	<p>25 days  Present Depth: 5518' 113' 23-1/4 hours  Present Operation: Drilling  Mud wt. 9.8, vis 34, w.l. 15, ck 2/32, pH 9, solids 5.5%,  cl<sub>2</sub> 130,000  Survey: None  PP 1200 psi, 58 rpm, wt. on bit 40,000#  Bit #7: 8-3/4" Reed HS-51J 5085/5518/433/62/Inc  Drilling 23-1/4 RS 3/4</p>	
10-14-80	<p>26 days  Present Depth: 5620' 102' 23 hours  Present Operation: Drilling  Mud wt. 10.2, vis 34, w.l. 13.6, ck 2/32, pH 8, solids 6%,  cl<sub>2</sub> 126,000  Survey: None  PP 1200 psi, 60 rpm, wt. on bit 40,000#  Bit #7: 8-3/4" Reed HS-51J 5085/5620/535/85/Inc  Drilling 23 Repair accumulator 1/2 RS 1/2</p>	
10-15-80	<p>27 days  Present Depth: 5728' 108' 18 hours  Present Operation: Drilling  Mud wt. 10.2, vis 34, w.l. 16.8, ck 2/32, pH 7.8, solids 6%,  cl<sub>2</sub> 156,000  Survey: None  PP 1000 psi, 60 rpm, wt. on bit 40,000#  Bit #7: 8-3/4" Reed HS-51J 5085/5728/643/103/Inc  Drilling 18 Wait on salt 4  RS 1/2 Mixing salt 1-1/2  Note: Top of salt at 5693'</p>	

## CITIES SERVICE COMPANY

## Daily Well History - Interim Report

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INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE - UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
		AFE NUMBER
		**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-16-80	28 days Present Depth: 5826' 98' 23 hours Present Operation: Drilling Mud wt. 10.4, vis 37, w.l. 13.6, ck 2/32, pH 7.8, solids 6%, cl <sub>2</sub> 180,000 Survey: None PP 1000 psi, 55 rpm, wt. on bit 25,000# Bit #7: 8-3/4" Reed HS-51J 5085/5826/741/126/Inc Drilling 23 Attempt survey 1/2 RS 1/2	
10-17-80	29 days Present Depth: 5965' 139' 14-1/2 hours Present Operation: Drilling Mud wt. 10.3, vis 38, w.l. 13.2, ck 2/32, pH 7.6, solids 5%, cl <sub>2</sub> 170,000 Survey: 1 degree at 5828' PP 1200 psi, 55 rpm, wt. on bit 35,000# Bit #7: 8-3/4" Reed HS-51J 5085/5828/743/126½ Bit #8: 8-3/4" HTC J-44 5828/5965/137/13½/Inc Drilling 14-1/2 RS 1/2 Trip (Pick up 3 D.C.'s & change out reamer) 9	
10-18-80	30 days Present Depth: 6230' 265' 21 hours Present Operation: Drilling Mud wt. 10.6, vis 35, w.l. 15, ck 2/32, pH 8.2, solids 5.5%, cl <sub>2</sub> 176,000 Survey: 1-1/4 degrees at 6079', 1 degree at 6229' PP 1200 psi, 55 rpm, wt. on bit 30,000# Bit #8: 8-3/4" J-44 (ZV984) 5828/6230/402/34½/Inc Drilling 21 Work on pump 1/2 Survey 1-3/4 RS 3/4	
10-19-80	31 days Present Depth: 6403' 173' 23 hours Present Operation: Drilling Mud wt. 10.7, vis 38, w.l. 15, ck 2/32, pH 10.0, solids 6.8%, cl <sub>2</sub> 165,000 Survey: None PP 1200 psi, 50 rpm, wt. on bit 45,000# Bit #8: 8-3/4" HTC J-44 5828/6403/575/57½/Inc Drilling 23 Work on pump 1/4 RS 3/4	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	WELL NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-20-80	32 days Present Depth: 6603' 200' 22-1/2 hours Present Operation: Drilling Mud wt. 10.4, vis 44, w.l. 15, ck 2/32, pH 7.9, solids 6.5%, cl <sub>2</sub> 177,000 Survey: None PP 1200 psi, 55 rpm, wt. on bit 35,000# Bit #8: 8-3/4" HTC J-44 5828/6603/775/80/Inc Drilling 22-1/2 RS 1/2 Clean shale pit 1	
10-21-80	33 days Present Depth: 6817' 214' 22 hours Present Operation: Drilling Mud wt. 10.2, vis 42, w.l. 10.8, ck 2/32, pH 8.2, solids 6%, cl <sub>2</sub> 179,000 Survey: 4 degrees at 6743' PP 1200 psi, 56 rpm, wt. on bit 30,000# Bit #8: 8-3/4" HTC J-44 5828/6817/989/102/Inc Drilling 22 RS 1 Survey 1	
10-22-80	34 days Present Depth: 7039' 222' 18-1/2 hours Present Operation: Drilling Mud wt. 10.3, vis 39, w.l. 13.6, ck 2/32, pH 8.4, solids 5%, cl <sub>2</sub> 172,000 Survey: 1-1/2 degrees at 6972' PP 1200 psi, 58 rpm, wt. on bit 20,000# Bit #8: 8-3/4" HTC J-44 5828/7039/1211/120 1/2/Inc Drilling 18-1/2 Survey 4-1/2 RS 3/4 RR 1/4	
10-23-80	35 days Present Depth: 7155' 116' 11 hours Present Operation: Drilling Mud wt. 10.5, vis 41, w.l. 14.6, ck 2/32, pH 8, solids 5%, cl <sub>2</sub> 181,000 Survey 2 degrees @ 7094' PP 1100 psi, 50 rpm, wt. on bit 25,000# Bit #8: 8-3/4" HTC J-44 5828/7094/1266/124-3/4 Bit #9: 8-3/4" HTC J-44 (CE 215) 7094/7155/61/6-3/4/Inc Drilling 11 Survey 3/4 Trip 12 Cut drilling line and check drill collars. RS 1/4	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

WELL UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	WELL NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
10-24-80	36 days Present Depth: 7313' 158' 22 hours Present Operation: Drilling Mud wt. 10.5, vis 38, w.l. 15.3, ck 2/32, pH 6.6, solids 5%, cl <sub>2</sub> 180,000 Survey 2 degrees @ 7284' PP 1200 psi, 53 rpm, wt. on bit 30,000# Bit #9: 8-3/4" HTC J-44 7049/7313/264/28-3/4/Inc Drilling 22 RS 3/4 Survey 1-1/4	
10-25-80	37 days Present Depth: 7530' 217' 21-3/4 hours Present Operation: Drilling Mud wt. 10.4, vis 39, w.l. 9.6, ck 2/32, pH 9.2, solids 5%, cl <sub>2</sub> 177,000. Survey 1-1/2 degrees @ 7348' PP 1100 psi, 56 rpm, wt. on bit 30,000# Bit #9: 8-3/4" HTC J-44 7049/7530/481/50-1/2/Inc. Drilling 21-3/4 RS 3/4 Survey 1 Circulate samples 1/2	
10-26-80	38 days Present Depth: 7550' 20' 2 hours Present Operation: TIH w/DST #1 Mud wt. 10.9, vis 37, w.l. 16.2, ck 2/32, pH 6.8, solids 6%, cl <sub>2</sub> 187,000 Survey None Bit #9: 8-3/4" HTC J-44 7049/7550/501/52-1/2 Drilling 2 RS 1/4 Circulate for DST #1 12-1/4 Trip and pickup test tool 10-1/2	



INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	WELL NUMBER **

DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED
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10-27-80

39 days  
Present Depth: 7557' 7' 1/4 hours  
Present Operation: Drilling  
Mud wt. 11.5, vis 41, w.l. 19.2, ck 3/32, pH 6.8, solids 14%,  
cl<sub>2</sub> 182,000  
Survey None  
PP 1100 psi, 52 rpm, wt. on bit 20,000#  
Bit #9: 8-3/4" HTC J-44 7049/7557/508/52-3/4/Inc  
TIH w/DST #1 3-3/4 RS 1/4  
Running DST #1 4-1/4 TOOH w/DST #1 5-1/4  
Breakout test tools 2-3/4 Pickup BHA and TIH 6-3/4  
Wash 45' to bottom 3/4 Drilling 1/4  
DST #1 7498-7550'(52') Paradox. Tool open for 15" preflow  
w/strong blow increasing to 16 psi after 3 minutes, 60 psi  
after 5 minutes, 80 psi after 10 minutes and 90 psi after  
15 minutes. Shut-in 30 minutes. Open tool for 50 minute  
test. Gas to surface immediately. Gas measurements as  
follows:

Time (Min's)	Choke	Pressure (PSI)	Rate (MCF)
5	1/4	10	30.8
10	1/4	22	50.2
15	1/4	26	56.3
20	1/4	28	59.0
25	1/4	26	56.3
30	1/4	22	50.2
35	1/4	20	47.0
40	1/4	18	44.0
45	1/4	16	41.0
50	1/4	16	41.0

Shut-in: 100 minutes  
Recovered 620' gas cut drilling fluid.  
IHP: 4543 psi 1st IFP: 954 psi 1st FFP: 954 psi  
ISIP: 1712 psi 2nd IFP: 763 psi 2nd FFP: 750 psi  
FSIP: 1333 psi FHP: 1333 psi  
Sampler pressure 30 psi. Recovered 2150 cc black gas cut drilling  
fluid.

10-28-80

40 days  
Present Depth: 7755' 198' 23-1/4 hours  
Present Operation: Drilling  
Mud wt. 10.7, vis 39, w.l. 16.6, ck 2/32, pH 6.4, solids 10%,  
cl<sub>2</sub> 167,000  
Survey None  
PP 1100 psi, 52 rpm, wt. on bit 30,000#  
Bit #9: 8-3/4" HTC J-44 7049/7755/706/76-1/2/Inc.  
Drilling 23-1/4 RS 3/4

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		AFE NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
10-29-80	41 days Present Depth: 7928' 173' 20-3/4 hours Present Operation: Drilling Mud wt. 10.5, vis 38, w.l. 13.0, ck 2/32, pH 6.4, solids 8.5%, cl2 172,000 Survey 1 degree @ 7848' PP 1100 psi, 55 rpm, wt. on bit 25,000# Bit #9: 8-3/4" HTC J-44 7049/7928/879/97-1/4/Inc. Drilling 20-3/4 Survey 2-1/2 RS 3/4	
10-30-80	42 days Present Depth: 8151' 223' 23 hours Present Operation: Drilling Mud wt. 10.5, vis 38, w.l. 14, ck 2/32, pH 6.4, solids 7% Survey None PP 1100 psi, 54 rpm, wt. on bit 40,000# Bit #9: 8-3/4" HTC J-44 7049/8151/1102/120-1/4/Inc. Drilling 23 RS 3/4 RR 1/4	
10-31-80	43 days Present Depth: 8517' 366' 23-1/4 hours Present Operation: Drilling Mud wt. 10.6, vis 38, w.l. 14.7, ck 2/32, pH 6.4, solids 6%, cl2 190,000 Survey None PP 1100 psi, 54 rpm, wt. on bit 15,000# Bit #9: 8-3/4" J-44 7049/8514/1468/143-1/2/Inc. Drilling 23-1/4 RS 3/4	
11-1-80	44 days Present Depth: 8725' 208' 13 hours Present Operation: Drilling Mud wt. 10.5, vis 38, w.l. 11, ck 2/32, pH 7.6, solids 7%, cl2 172,000 Survey 1-1/2 degrees @ 8540' PP 1100 psi, 54 rpm, wt. on bit 15,000# Bit #9: 8-3/4" HTC J-44 7049/8517/1468/143-1/2 Bit #10: 8-3/4" HTC J-44 (VT 854) 8517/8725/208/13/Inc. Circulate 2-1/2 Dress bit 1/2 Drilling 13 Trip 7-1/2 RS 1/2	

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
11-2-80	45 days	Present Depth: 9040' 315' 22-1/2 hours Present Operation: Circulating for survey Mud wt. 10.4, vis 44, w.l. 13, ck 2/32, pH 8, solids 7%, cl <sub>2</sub> 182,000 Survey None PP 1100 psi, 54 rpm, wt. on bit 15,000# Bit #10: 8-3/4" HTC J-44 8517/9040/523/35-1/2/Inc. Drilling 22-1/2 RS 3/4 RR 3/4
11-3-80	46 days	Present Depth: 9159' 119' 20-1/4 hours Present Operation: Drilling Mud wt. 10.3, vis 45, w.l. 16.4, ck 2/32, pH 8.5, solids 4.8%, cl <sub>2</sub> 184,000 Survey 1-1/2 degrees @ 9030' PP 1200 psi, 54 rpm, wt. on bit 40,000# Bit #10: 8-3/4" HTC J-44 8517/9159/642/55-3/4/Inc. Circulate for survey 1-1/2 Survey 1-3/4 RS 1/2 Drilling 20-1/4
11-4-80	47 days	Present Depth: 9406' 247' 19-1/2 hours Present Operation: Drilling Mud wt. 10.5, vis 54, w.l. 7, ck 2/32, pH 8.2, solids 5.4, cl <sub>2</sub> 182,000 Survey None PP 1200 psi, 55 rpm, wt. on bit 15,000# Bit #10: 8-3/4" HTC J-44 8517/9406/889/75-1/4/Inc. Drilling 19-1/2 RS 1/2 Work stuck pipe 2 Circulate 2
11-5-80	48 days	Present Depth: 9496' 90' 23-1/2 hours Present Operation: Drilling Mud wt. 10.3, vis 60, w.l. 7.4, ck 2/32, pH 8, solids 4.5%, cl <sub>2</sub> 183,000 Survey: None PP 1800 psi, 55 rpm, wt. on bit 40,000# Bit #10: 8-3/4" HTC J-44 8517/9496/979/98-3/4/Inc RS 1/2 Drilling 23-1/2

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	AFE NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
11-6-80	<p>49 days  Present Depth: 9596' 100' 21-3/4 hours  Present Operation: Trip out of hole (drill pipe backed off)  Mud wt. 10.4, vis 57, w.l. 7.2, ck 2/32, pH 8.4, solids 5.9%,  cl<sub>2</sub> 178,000  Survey: None  PP 1100 psi, 55 rpm, wt. on bit 40,000#  Bit #10: 8-3/4" HTC J-44 8517/9596/1079/120 1/2 /Inc  Drilling 21-3/4  Screw into drill pipe (Drill pipe backed off 1 jt. below rotary table) 1  Work tight spot 1/2 RS 3/4</p>	
11-7-80	<p>50 days  Present Depth: 9596'  Present Operation: Picking up overshot w/new grapple  Mud wt. 10.4, vis 57, w.l. 7.2, ck 2/32, pH 8.4, solids 5.9%,  cl<sub>2</sub> 178,000  Survey: None  Trips 11-1/2 Picking up fishing tools 3-1/2  Fishing w/overshot (Overshot comes off fish w/35,000# pull over weight of string) 5  Waiting on fishing tools 5  Note: 5200' of fish in hole.</p>	
11-8-80	<p>51 days  Present Depth: 9596'  Present Operation: TIH w/Mill  Mud wt. 10.5, vis 52, w.l. 5.4, ck 2/32, pH 8.0,  solids 5.5%, cl<sub>2</sub> 178,000  Survey: None  Trips 11 Fishing 4  Fishing: Made 3 trips w/conventional overshot and grapple. Could not get overshot to stay on fish. Last trip recovered 10" drill pipe sliver in overshot. Pick up 19' overshot extension and tried to get on tool joint. Got on tool joint w/overshot and grapple but could not get grapple to hold when picked up on fish. Left two grapples in hole.  Picking up &amp; breaking out fishing tools 6-1/4  Waiting on fishing tools 2-3/4</p>	

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LEASE / UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
11-9-80	<p>52 days  Present Depth: 9596'  Present Operation: TOOH w/fish  Mud wt. 10.5, vis 55, w.l. 5.6, ck 2/32, pH 8.2,  solids 5.5%, cl<sub>2</sub> 179,000  Survey: None  Bit #10: HTC 8-3/4" J44 8517/9596/1079/120½ hrs  Trips 8-1/2 Milling 8-1/4  WO tools 1 PU tools 1/4  RU McCullough 1-1/4 Attempt to run free point 2-1/2  Jarring on fish 2-1/4  Remarks: Top of fish @ 4350' wireline (Milled 4355-60').  Caught fish. Attempted to run freepoint tool - could not  get inside fish. Jarred on fish. TOOH.</p>	
11-10-80	<p>53 days  Present Depth: 9596' (Shale)  Present Operation: Pick up drill collars  Mud wt. 10.5, vis 54, w.l. 6.6, ck 2, pH 8, solids 5.5%,  cl 182,000  Bit #10: HTC 8-3/4" J44 8517/9596/1079/120½  TOOH w/fish 10 RR 1-1/2  Break down fishing tools 2  Lay down bad drill pipe 5  Waiting on new drill pipe 2 Unload pipe 2  Pick up new drill collars 1-1/2  Remarks: Recovered 150 jts DP &amp; 2 DC's (Drilling jars  parted). LD 77 bad jts DP.</p>	
11-11-80	<p>54 days  Present Depth: 9596' (Shale)  Present Operation: TOOH w/fish  Mud wt. 10.5, vis 53, w.l. 6.8, ck 2, pH 8, solids 6%,  cl<sub>2</sub> 179,000  Bit #10: HTC 8-3/4" J44 8517/9596/1079/120½  TIH 3 PU pipe 5  W.O. McCullough 1/2  Attempt to run freepoint 2 Jar on fish 5  TOOH w/fish 7-1/2 RR 1  Remarks: Freepoint tool would not go past 8595'.  This is probably top of fishing collars.</p>	

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LEASE / UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
11-12-80	<p>55 days  Present Depth: 9596'  Present Operation: TOOH w/fish  Mud wt. 10.5, vis 53, w.l. 6.8, ck 2, pH 8, solids 6%,  cl<sub>2</sub> 179,000  Bit #10: HTC 8-3/4" J44 8517/9596/1079/120½  TOOH w/fish 3 Lay down collars 2  PU fishing tools 1/2 TIH 4  Circulate 1-1/2  Attempt to run freepoint 2-1/2  Jarring 9-1/2 TOOH with fish 1  Remarks: Yesterday recovered bottom half of the Dailey  drilling jars and 4 collars. Have 15 collars left in  hole.</p>	
11-13-80	<p>56 days  Present Depth: 9123' (top fish) 9596' TD  Present Operation: Circulate for plug (prep to sidetrack)  Mud wt. 10.5, vis 53, w.l. 6.8, ck 2, pH 8, solids 6%  TOOH 5-1/2 Breakdown fishing tools 1/2  WOO 3/4 TIH open ended 4-3/4  Circulate 12-1/2</p>	
11-14-80	<p>57 days  Present Depth: PBD 8923'+  Present Operation: WOC  Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8.0, solids 6%  Circulate for cement plug 3 Waiting on cementers 9  Set cement plug 3/4  Pumped 160 sx class "G" with .75% NFR-1 and .4% CDR-1, cement  preceded with 20 bbls chemical wash.  TOOH 4 WOC 7-1/4</p>	

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Federal "DE" #1		Western
COUNTY-PARISH-STATE-PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		AGE NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
11-15-80	58 days Present Depth: 9123' Present Operation: T00H w/bit Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8.0, solids 6%, cl <sub>2</sub> 182,000 Bit #9: 8-3/4" HTC J-44 8923/9123/200/6½ WOC 8 TIH 7 Wash & ream on cement (Tag cement @ 8923') 6-1/2 Circulate 2 T00H 1/2	
11-16-80	59 days Present Depth: PBDT + 8703' Present Operation: WOC Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8, solids 6%, cl <sub>2</sub> 182,000 Trips 16-3/4 Circulate for cement plug 1-1/4 Spot cement plug 1 WOC 5 Pumped 200 sx Dowell Class B salt saturated cement w/1% D-65. Cement preceded w/10 bbls brine water.	
11-17-80	60 days Present Depth: PBDT 8494' Present Operation: T00H laying down drill pipe Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8.0, solids 6%, cl <sub>2</sub> 182,000 Bit #9: 8-3/4" HTC J-44 8472/8494/22/1 WOC 13-1/2 TIH and tag cement @ 8472' 7-1/4 RS 1/4 Drilling cement to 8494' 1 Circulate 2	
11-18-80	61 days Present Depth: PBDT 8494' Present Operation: Laying down drill collars Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8.0, solids 6%, cl <sub>2</sub> 182,000 Laying down and inspecting drill pipe 24	

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
		AFE NUMBER
		**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
11-19-80	62 days PBTD: 8494' Present Operation: Picking up drill pipe Mud wt. 10.5, vis 53, w.l. 6.8, ck 2/32, pH 8.0, solids 6%, cl <sub>2</sub> 182,000 Lay down drill collars 4 Inspect drill collars and drill pipe 20	
11-20-80	63 days Present Depth: 8494' Present Operation: Picking up drill pipe Mud wt. 10.6, vis 50, w.l. 17.6, ck 2/32, pH 9.2, solids 7% Bit #9: 8-3/4" HTC J-44 8494/8494/0/0/Inc Circulate 6-1/2 RR 1/2 Clean shale pits 1/2 Pick up drill pipe 16-1/2	
11-21-80	64 days Present Depth: 8770' 276' 2-1/2 hours Present Operation: Circulating for TOOH Mud wt. 10.5, vis 50, w.l. 14.6, ck 2/32, pH 9.0, solids 6% Survey: None Bit #9: 8-3/4" HTC J-44 8494/8770/276/2½ Mixing mud 6-1/2 Trips 13-1/4 Change BHA 1-1/2 RS 1/4 Drill w/Dyna-Drill and circulate 2-1/2	
11-22-80	65 days Present Depth: 8777' 7' 1/4 hour Present Operation: Drilling Mud wt. 10.5, vis 50, w.l. 14.2, ck 2/32, pH 11, solids 5.5%, cl <sub>2</sub> 182,000 Survey: None PP 1000 psi, 61 rpm, wt. on bit 20,000# Bit #11: 8-3/4" Reed FP 63J (637161) 8770/8777/7¼/Inc Circulate 1 Test BOP's to 1000 psi 3/4 Trips 18-1/2 Lay down rented drill pipe 2 H <sub>2</sub> S drill 3/4 Drilling 1/4 RS 1/2 Ream 30' to bottom 1/4	



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LEASE UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
		AFE NUMBER
		**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
11-23-80	66 days Present Depth: 8864' 67' 4-3/4 hours Present Operation: TIH w/Dyna-Drill Mud wt. 10.5, vis 55, w.l. 12, ck 2/32, pH 11.2, solids 6%, cl <sub>2</sub> 170,000 Survey: 1-3/4 degrees at 8864' PP 1000 psi, 54 rpm, wt. on bit 15,000# Bit #11: 8-3/4" Reed FP-63J (637161) 8770/8864/94/12 Trips 5-1/2 Pick up Dyna-Drill 1/2 Drilling 4-3/4 Circulate for survey 1 Survey 1-3/4 Circulate & condition mud 10-1/2	
11-24-80	67 days Present Depth: 8931' 67' 5 hours Present Operation: TOOH w/Dyna-Drill Mud wt. 10.5, vis 40, w.l. 15.4, ck 2/32, pH 10.7, solids 5.5% Survey: None PP 1000 psi, 0 rpm, wt. on bit 10,000# Bit #11: 8-3/4" Reed FP63 8770/8931/161/17 Cut drilling line 1-1/2 TIH w/Dyna-Drill 11 Drilling w/Dyna-Drill 5 RS 1/4 TOOH w/Dyna-Drill 5 Change Dyna-Drill 1/2 Circulate 3/4	
11-25-80	68 days Present Depth: 8931' 0 0 hours Present Operation: Waiting on mechanic Mud wt. 10.5, vis 40, w.l. 14.6, ck 2/32, pH 10.5, solids 5.5% Survey: None Bit #11: 8-3/4" Reed FP63 8770/8931/161/17 TOOH w/Dyna-Drill 1 RR (Work on draw works and wait on mechanic) 23	
11-26-80	69 days Present Depth: 8931' Present Operation: Rig repair (draw works) Mud wt. 10.4, vis 40, w.l. 8.6, ck 2/32, pH 8.5, solids 6%, cl <sub>2</sub> 170,000 Survey: None Bit #11: 8-3/4" Reed FP63 8770/8931/161/17 Waiting on mechanic & rig repair 24	

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LEASE UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
11-27-80	70 days	Present Depth: 8968' 37' 8 hours Present Operation: Drilling Mud wt. 10.4, vis 38, w.l. 6.0, ck 2/32, pH 8.5, solids 5% PP 1000 psi, 60 rpm, wt. on bit 35,000# Bit #11: 8-3/4" Reed F-P63 8770/8968/198/25 Inc Drilling 8 RR 6-1/2 Circulate and Ream 1-3/4 Trip 8-1/4
11-28-80	71 days	Present Depth: 9073' 105' 8 hours Present Operation: Trip Mud wt. 10.5, vis 38, w.l. 3.0, ck 2.32, pH 8.5, solids 5% cl 170,000 Survey: 8 degrees at 9033' Bit #11: 8-3/4" Reed FP63 8770/9073/303/33 Drilling 8 Survey 3 Trip 9-1/4 RR 2-3/4 Change BH Assemble 1
11-29-80	72 days	Present Depth: 9128' 55' 17 hours Present Operation: Drilling Mud wt. 10.4, vis 37, w.l. 4.8, ck 2/32, pH 8.5, solids 5% PP 1000 psi, 55 rpm, wt. on bit 30,000# Bit #11: 8-3/4" Reed FP63 8770/9128/358/50 Inc Drilling 17 Trip 4 RR 2 Ream 1
11-30-80	73 days	Present Depth: 9173' 45' 22-1/2 hours Present Operation: Drilling Mud wt. 10.4, vis 42, w.l. 4.8, ck 2/32, pH 8.5, solids 5% PP 1050 psi, 54 rpm, wt. on bit 40,000# Bit #11: 8-3/4" Reed FP63 8770/9173/403/72-1/2 Inc Drilling 22-1/2 RS 1/2 RR 1
12-1-80	74 days	Present Depth: 9273' 100' 23-1/4 hours Present Operation: Drilling Mud wt. 10.4, vis 42, w.l. 2.4, ck 2/32, pH 8.4, solids 6% cl 178,000 PP 1000 psi, rpm 55, wt. on bit 15,000# Bit #11: 8-3/4" Reed FP63 8770/9273/503/95-3/4 Inc Drilling 23-1/4 RS 3/4

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WELL UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	WELL NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
12-2-80	<p>75 days  Present Depth: 9348' 75' 23-1/4 hours  Present Operation: Drilling  Mud wt. 10.5, vis 44, w.l. 2.4, ck 2/32, pH 8.4, solids 6%  cl 174,000  PP 1000 psi, 54 rpm, wt. on bit 15-40,000#  Bit #11: 8-3/4" Reed FP63 8770/578/119  Drilling 23-1/4 RS 3/4</p>	
12-3-80	<p>76 days  Present Depth: 9376' 22' 5-3/4 hours  Present Operation: Drilling  Mud wt. 10.5, vis 45, w.l. 4.2, ck 2/32, pH 8.4, solids 6.8%  PP 1200 psi, 50-55 rpm, wt. on bit 15-35,000#  Survey: 7-1/2 degrees at 9354'  Bit #11: 8-3/4" Reed FP63 8770/9354/584/128-1/2  Bit #12: 8-3/4" HTC J-33 (Serial No. EH390) 9354/22/4-1/4/Inc  Drilling 5-3/4 Circulate and Survey 2 Trip 13-1/2  Ream 90' to bottom 2-3/4</p>	
12-4-80	<p>77 days  Present Depth: 9509' 133' 23 hours  Present Operation: Drilling  Mud wt. 10.4, vis 45, w.l. 3.8, ck 2/32, pH 8.8, solids 4.5%  PP 1200 psi, 50 rpm, wt. on bit 15-35,000#  Bit #12: 8-3/4" HTC J-33 9354/9509/155/27-1/4/Inc  Drilling 23 RR 1/2 Clean Pits 1/2</p>	
12-5-80	<p>78 days  Present Depth: 9610' 101' 21-1/2 days  Present Operation: Drilling  Mud wt. 10.6, vis 45, w.l. 6.4, ck 1/32, pH 8.6, solids 5%  PP 1200 psi, 50 rpm, wt. on bit 35,000#  Drilling 21-1/2 RS 1/2 RR 1-3/4  Work tite hole 1/4</p>	

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LEASE / UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
12-6-80	<p>79 days  Present Depth: 9673' 63' 23-1/2 hours  Present Operation: Drilling  Mud wt. 10.7, vis 45, w.l. 10.4, ck 2/32, pH 8.9, solids 4.5%  PP 1200 psi, 55 rpm, wt. on bit 40,000#  Bit #12: 8-3/4" HTC J-33 9354/9673/319/72/Inc  Drilling 23-1/2 RS 1/2</p>	
12-7-80	<p>80 days  Present Depth: 9732' 59' 23-1/2 hours  Present Operation: Drilling  Mud wt. 10.7, vis 48, w.l. 19, ck 1/32, pH 8.6, solids 7%  Bit #12: 8-3/4" HTC J-33 9354/9732/378/95½  PP 1200 psi, 55 rpm, wt. on bit 35,000#  Drilling 23-1/2 RS 1/2</p>	
12-8-80	<p>81 days  Present Depth: 9801' 69' 23-1/4 hours  Present Operation: Drilling  Mud wt. 10.7, vis 53, w.l. 14.8, ck 2/32, pH 8.6, solids 7.5%, cl<sub>2</sub> 180,000  Survey: None  PP 1200 psi, 60 rpm, wt. on bit 40,000#  Bit #12: 8-3/4" HTC J-33 9354/9801/457/118-3/4/Inc  Drilling 23-1/4 RR 1/2  RS 1/4</p>	
12-9-80	<p>82 days  Present Depth: 9848' 47' 15-1/2 hours  Present Operation: Laying down drill collars  Mud wt. 10.7, vis 45, w.l. 12, ck 2/32, pH 8.4  Survey: None  PP 1200 psi, 60 rpm, wt. on bit 40,000#  Bit #12: 12-1/4" HTC J-33 9354/9848/504/134¼  Drilling 15-1/2  Trip and lay down rental drill collars 8-1/2</p>	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		AFE NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
12-10-80	83 days Present Depth: 9886' 38' 5-3/4 hours Present Operation: Drilling Mud wt. 10.8, vis 56, w.l. 11, ck 2/32, pH 8.6, solids 7.5%, cl <sub>2</sub> 180,000 Survey: None PP 1200 psi, 60 rpm, wt. on bit 35,000# Bit #13: 8-3/4" HTC J-44 (RJ055) 9848/9886/38/5-3/4/Inc Trip 10-3/4 Ream & wash to bottom 5-3/4 Rig inspection by Utah OSHA 1-3/4 Drilling 5-3/4	
12-11-80	84 days Present Depth: 9982' 96' 23-1/2 hours Present Operation: Drilling Mud wt. 10.7, vis 58, w.l. 14.8, ck 2/32, pH 8.6, solids 8% Survey: None PP 1400 psi, 62 rpm, wt. on bit 40,000# Bit #13: 8-3/4" HTC J-44 9848/9982/134/29 1/4/Inc Drilling 23-1/2 RS 1/2	
12-12-80	85 days Present Depth: 10,119' 137' 23-1/4 hours Present Operation: Drilling Mud wt. 10.9, vis 62, w.l. 12, ck 2/32, pH 6.6, solids 7%, cl <sub>2</sub> 178,000 Survey: None PP 1400 psi, 50 rpm, wt. on bit 35,000# Bit #13: 8-3/4" J-44 (RJ 7055) 9848/10119/271/52 1/2/Inc Drilling 23-1/4 RS 3/4	
12-13-80	86 days Present Depth: 10,149' 20' 6 hours Present Operation: Working stuck drill string Mud wt. 10.4, vis 70 Survey: None PP 120 psi, 50 rpm, wt. on bit 40,000# Bit #13: 8-3/4" HTC J-44 9848/10139/291/58-1/2/Inc. Drilling 6 Lost circulation and mix mud. (Lost approximately 700 bbls mud to formation.) 4-1/2 Spot 70 bbls diesel 2 Wait on diesel to work on hole 1 Circulate and work stuck pipe 10-1/2	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY - PARISH - STATE - PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
12-14-80	<p>87 days  Present Depth: 10,149'      0      0  Present Operation: Working stuck drill string  Mud wt. 10.4, vis 62, w.l. 26.8, ck 2/32, pH 6.0, solids 7%  Survey: None  PP 800 psi  Bit #13: 8-3/4" HTC J-44 9848/10139/291/58-1/2/Inc.  Wait on diesel to work on hole 12  Circulate and condition mud 8-3/4  Spot 2nd 70 bbls diesel slug 3-1/4</p>	
12-15-80	<p>88 days  Present Depth: 10,149'      0      0  Present Operation: TOOH after backing off  Mud wt. 10.1, vis 60, w.l. 12, ck 3/32, pH 6.8, solids 7%  Survey: None  Bit #13: 8-3/4" HTC J-44 9848/10149/30/58-1/2/Inc.  Spot diesel slug 1/2  Wait on diesel to work on hole 10-1/2  Circulate and condition mud 7  Rig up GO, run free point and back off at 9780' 5  TOOH after backing off 1  Note: Fish in hole: bit, 2 drill collars, IBS stabilizer,  3 point reamer, 7 drill collars</p>	
12-16-80	<p>89 days  Present Depth: 10,149'      0      0  Present Operation: Circulating and jarring on fish  Mud wt. 10.3, vis 75, w.l. 12.4, ck 3/32, pH 6.4, solids 7%  Survey: None  PP 1000 psi, 0 rpm, wt. on bit 0  Bit #13: 8-3/4" HTC J-44 9848/10149/301/58-1/2/Inc.  TOOH 5 Pick up fishing tools 2 TIH 4  Jar and circulate on fish 13</p>	
12-17-80	<p>90 days  Present Depth: 10,149'      0      0  Present Operation: Washing over fish at 9840'  Mud wt. 10.3, vis 48, w.l. 16.4, ck 3/32, pH 6.8, solids 7%  Survey: None  PP 350 psi, 40 rpm, wt. on bit 5,000#  Bit #13: 8-3/4" HTC J-44 9810/10149/339/58-1/2/Inc.  Pick up wash pipe 1 TIH 5 Jar and circulate 4-1/4  RS 1/2 RR 3/4 Lay down fishing tools 3  TOOH 5 Run free point 2-1/2  Back off drill collars at 9812'</p>	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	AFE NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
12-18-80	91 days Present Depth: 10,149' Present Operation: Attempting to back off at 9842' Mud wt. 10.3, vis 76, w.l. 13.6, ck 2/32, pH 6.8, solids 7%, cl <sub>2</sub> 182,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58 $\frac{1}{2}$ /Inc Circulate w/washover pipe 3-1/4 TOOH w/washover pipe 5-3/4 Make up BHA 1/2 TIH 5 Screw into fish 1/2 Run free point 6-3/4 Run backoff shot 2-1/4	
12-19-80	92 days Present Depth: 10,149' Present Operation: Circulating and conditioning mud Mud wt. 10.3, vis 80, w.l. 4.2, ck 2/32, pH 6.4, solids 5%, cl <sub>2</sub> 185,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58-1/2/Inc. Run back-off shot at 9842' 1 Circulate and condition mud 23	
12-20-80	93 days Present Depth: 10,149' Present Operation: TOOH w/wash pipe Mud wt. 10.4, vis 68, w.l. 6.6, ck 2/32, pH 6.4, solids 5%, cl <sub>2</sub> 180,000 Survey: None PP 750 psi, 54 rpm, wt. on bit 5,000# Bit #13: 8-3/4" HTC J-44 9848/10149/301/58-1/2/Inc. TOOH 6-1/2 Cut drilling line 2 Lay down BHA (Recovered 1 collar of fish) 1/2 Pick up washover pipe 1 TIH w/washover pipe 5 Washover fish to 9962' (Top of fish at 9842') 5 Circulate 3 RR 1	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	AFE NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
12-21-80	94 days Present Depth: 10,149' Present Operation: Pick up wash pipe. Mud wt. 10.3, vis 82, w.l. 4.8, ck 2/32, pH 6.4, solids 5% Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58 $\frac{1}{2}$ /Inc TOOH w/wash pipe 3-1/2 Lay down wash pipe 1/2 Pick up BHA 1 TIH 4 Jar on fish 1 Run free point & back off @ 9902' 4-1/2 TOOH w/fishing string (Recovered 2 drill collars) 5-1/2 Lay down BHA 2-1/2 Pick up wash pipe 1-1/2	
12-22-80	95 days Present Depth: 10,149' Present Operation: Attempting to circulate. Mud wt. 10.3, vis 73, w.l. 5.6, ck 2/32, pH 6.4, solids 8.0%, cl <sub>2</sub> 178,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58 $\frac{1}{2}$ /Inc TIH w/washover pipe 4-1/2 Circulate 1/4 Washover fish 1-3/4 Circulate 2 TOOH w/washover pipe 5 Lay down washover pipe 2 TIH & latch on fish 5 Jar and work fish 3/4 Run free point 2-3/4	
12-23-80	96 days Present Depth: 10,149' Present Operation: TOOH w/fish Mud wt. 10.3, vis 75, w.l. 5.2, ck 2/32, pH 6.8, solids 6% Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58-1/2/Inc. Circulate and jar on fish 12-1/2 Run free point and back off at 10,027' 5-1/4 TOOH w/fish 5-1/4 RR 1 (Recovered 4 drill collars and 3-point reamer)	



INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE, UNIT NAME AND WELL NO. Federal "DE" #1		REGION Western
COUNTY-PARISH-STATE-PROVINCE Grand County, Utah	FIELD OR PROSPECT NAME Ten Mile	AFE NUMBER **

DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED
12-24-80	<p>97 days  Present Depth: 10,149' (Top of fish 10,027')  Present Operation: Washing over stabilizer  Mud wt. 10.3, vis 56, w.l. 6.4, ck 2/32, pH 6.4, solids 6%  Survey: None  PP 800 psi, 45 rpm, wt. on bit 3,000#  Bit #13: 8-3/4" HTC J-44 9848/10149/301/58-1/2/Inc.  Lay down 4 drill collars and reamer 4  Pick up wash pipe and shoe 1  Wait on diamond shoe 3  TIH w/washover pipe 5  Washover fish (6" in 4 hours) 11</p>
12-25-80	<p>98 days  Present Depth: 10,149'  Present Operation: TOOH w/washpipe  Mud wt. 10.3, vis 63, w.l. 5.2, ck 1/32, pH 6.8, solids 6%  Survey: None  Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc  TOOH w/washpipe 2-1/4  Mill on IBS stabilizer 21-3/4</p>
12-26-80	<p>99 days  Present Depth: 10,149'  Present Operation: Run wireline w/Dia-Log  Mud wt. 10.3, vis 64, w.l. 5.6, ck 2/32, pH 7.0, solids 6%  Survey: None  Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc  TOOH w/washpipe 2-1/2 WOO 1/2  Stand back washover pipe 2  TIH w/fishing string 4  Circulate and jar on fish 8-1/4  Wireline work w/Dia-Log 6-3/4</p>
12-27-80	<p>100 days  Present Depth: 10,149'  Present Operation: Washing over fish  Mud wt. 10.4, vis 63, w.l. 5.8, ck 2/32, pH 6.8, solids 6%  Survey: None  Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc  Wireline work w/Dia-Log 4-1/2  TOOH 5 Change out drilling line 2  Lay down fishing assembly (Recovered 1 drill collar and IBS stabilizer) 1-3/4  TIH w/washover pipe 5-1/4 Circulate 1/4  Washover fish 5-1/4</p>

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
12-28-80	101 days Present Depth: 10,149' Present Operation: T00H w/washpipe Mud wt. 10.3, vis 59, w.l. 4, ck 2/32, pH 6.8, solids 7%, cl <sub>2</sub> 187,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc T00H w/washpipe 9 Wait on pipe elevators 4 Circulate 1 Washover fish to 10,119' 10 Note: Top of fish at 10,059'. While coming out of hole, pipe elevators broke on 2nd stand. Also, rig down to one motor due to compound repairs.	
12-29-80	102 days Present Depth: 10,149' Present Operation: Waiting on mechanic Mud wt. 10.3, vis 59, w.l. 5.2, ck 2/32, pH 7, solids 6% Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc Pick up BHA 3 TIH 4 Screw into fish 1/2 T00H w/fish (Recovered 2 drill collars and bit) 6 Lay down fish (All fish recovered except 3 bit jets) 3/4 Wait on mechanic 9-3/4	
12-30-80	103 days Present Depth: 10,149' Present Operation: Waiting on mechanic Mud wt. 10.3, vis 60, w.l. 5.3, ck 2/32, pH 6.8, solids 6%, cl <sub>2</sub> 180,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc Magnaflux drill collars 3-1/2 Wait on mechanic 20-1/2	
12-31-80	104 days Present Depth: 10,149' Present Operation: Waiting on rig mechanic Mud wt. 10.3, vis 60, w.l. 5.3, ck 2/32, pH 6.8, solids 6%, cl <sub>2</sub> 180,000 Survey: None Bit #13: 8-3/4" HTC J-44 9848/10149/301/58½/Inc Waiting on rig mechanic 24	

INSTRUCTIONS: Interim Reports shall be completed and submitted with the Completion Report for the well. Interim Reports are required for all drilling wells and may also be used for recording daily work on significant workovers. The description of work performed on Interim Reports should be a complete report of each days Drilling Activity. Submit the Interim Report on all wells that have suspended drilling activity.

LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		WELL OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
1-1-81	105 days Present Depth: 10,209' 60' 6 hours Present Operation: Drilling Mud wt. 10.3, vis 75, w.l. 2.8, ck 2/32, pH 6.6, solids 4.5%, cl <sub>2</sub> 195,000 Survey: None PP 650 psi, 60 rpm, wt. on bit 40,000# Bit #14: 8-3/4" HTC J-44 (FLO77) 10149/10209/60/5/Inc. Drilling 6 TIH 5-1/2 Pick up BHA 6 Wait on mechanic 6-1/2	
1-2-81	106 days Present Depth: 10,334' 125' 19-1/2 hours Present Operation: Short trip Mud wt. 10.5, vis 65, w.l. 5.2, ck 2/32, pH 5.0, solids 5%, cl <sub>2</sub> 196,000 Survey: None PP 700 psi, 60 rpm, wt. on bit 40,000# Bit #14: 8-3/4" HTC J-44 10149/10334/185/24-1/2/Inc. Drilling 19-1/2 RS 1/2 Work tite hole 2 Short trip 2	
1-3-81	107 days Present Depth: 10,450' 116' 22 hours Present Operation: Drilling Mud wt. 10.2, vis 70, w.l. 6.4, ck 2/32, pH 6, solids 4.5%, cl <sub>2</sub> 198,000 Survey: None PP 1000 psi, 55 rpm, wt. on bit 40,000# Bit #14: 8-3/4" HTC J-44 10149/10450/301/46-1/2/Inc. Drilling 22 Wash to bottom 1-1/4 RS 1/4 Short trip 1/2	
1-4-81	108 days Present Depth: 10,523' 73' 23-3/4 hours Present Operation: Drilling Mud wt. 10.4, vis 61, w.l. 7.2, ck 2/32, pH 6, solids 4.9%, cl <sub>2</sub> 195,000 Survey: None PP 1000 psi, 55 rpm, wt. on bit 40,000# Bit #14: 8-3/4" HTC J-44 10149/10523/374/70 1/4/Inc Drilling 23-3/4 RS 1/4	

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LEASE UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		★★
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
1-5-81	109 days Present Depth: 10,590' 68' 22-1/4 hours Present Operation: Drilling Mud wt. 10.4, vis 58, w.l. 9.0, ck 2/32, pH 5.8, solids 4.8%, cl <sub>2</sub> 195,000 Survey: None PP 1000 psi, 55 rpm, wt. on bit 40,000# Bit #14: 8-3/4" HTC J-44 10149/10590/341/92 1/2 Inc Drilling 22-1/4 Wait on crew 1/2 RS 1/4	
1-6-81	110 days Total Depth: 10,608' - Driller 10,606' - Logger 18' 6-1/2 hours Present Operation: Logging Mud wt. 10.4, vis 65, w.l. 9, ck 2/32, pH 5.8, solids 4.8 Survey: None Bit #14: 8-3/4" 10149/10608/459/99 Drilling 6-1/2 Circulate 4 TOOH 9-1/2 Rig up Schlumberger 1 Logging 3	
1-7-81	111 days Total Depth: 10,608' Present Operation: Logging Mud wt. 10.4, vis 65, w.l. 9, ck 2/32, pH 5.8, solids 4.8% Survey: None Logging 15 Wait on logging tools 8 Lay down drill collars 1	
1-8-81	112 days Total Depth: 10,602' Present Operation: Waiting on cement truck Logging 5-1/2 Lay down drill collars 1-1/2 Trip 6 Waiting on cement truck 11	
1-9-81	113 days Total Depth: 10,608' PBTD: 10,130' Present Operation: TIH to dress off cement plug Bit #7: 8-3/4" Reed HS 51J Wait on cementers 9 Set cement plug 2 TOOH w/DP 6 TIH w/bit 5 RR 2 Note: Spot 60 sx salt saturated Class "G" from 10,310 - 10,130'.	

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LEASE / UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME
Grand County, Utah		Ten Mile
DATE AND DEPTH		WELL NUMBER
		**
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED
1-10-81	114 days Total Depth: 10,608' Present Operation: TOOH w/drill string Bit #7: 8-3/4" Reed HS-51J TIH w/bit 1 Circulate & WOC. Attempt to tag plug @ 12 hrs, 16 hrs, 24 hrs. 16-1/2 Wash 190' w/bit 1 Circulate out bad cement 2-1/2 TOOH 3	
1-11-81	115 days Present Depth: 10,608' PBTD 10,115' Present Operation: TOOH w/drill pipe Bit #7: 8-3/4" Reed HS-51J Trips 21 Set cement plug 10,300-10,115' w/80 sx salt saturated Class G cement 1 Circulate and condition hole 2	
1-12-81	116 days Present Depth: 10,608' PBTD 10,130' Present Operation: Working stuck pipe @ 10,100' Mud wt. 10.6, vis 78, w.l. 22.8, ck 4/32, pH 9.6, solids 8% Bit #7: 8-3/4" Reed HS-51J Work stuck pipe 7 TIH 5-1/2 Spot 35 bbls diesel 1 Pick up bottomhole collar 1 Work stuck pipe w/jars 6-1/2 Circulate 3/4 Drilling 55' cement 2-1/4	
1-13-81	117 days Present Depth: 10,608' PBTD 10,187' Present Operation: Trip out of hole. Mud wt. 10.7, vis 131, w.l. 21, ck 4/32, pH 9.6 PP 1200 psi Bit #7: 8-3/4" Reed HS-51J Work stuck pipe and circulate 12-1/2 Run free point 7 TOOH 4-1/2 Note: Fish in hole: 10 drill collars and bit. Top of fish at 9860'.	

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WELL UNIT NAME AND WELL NO.		REGION	
Federal "DE" #1		Western	
COUNTY - PARISH - STATE - PROVINCE		FIELD OR PROSPECT NAME	
Grand County, Utah		Ten Mile	
DATE AND DEPTH		WELL NUMBER	
		**	
DATE AND DEPTH		DESCRIPTION OF WORK PERFORMED	
1-14-81		118 days Total Depth: 10,608' PBD 10,171' Top of fish @ 9827' Present Operation: Jarring on fish Mud wt. 10.7, vis 131, w.l. 21, ck 4/32, pH 9.6, solids 8%, cl <sub>2</sub> 199,000 Bit #7: 8-3/4" Reed HS 51-J Lay down bottom hole assembly 4 Pick up fishing tools and jars 3 RR 1 TIH w/fishing tools 4 Jar on fish 12	
1-15-81		119 days Total Depth: 10,608' PBD 10,171' Top of fish @ 9827' Present Operation: Circulating & conditioning mud Mud wt. 10.5, vis 52, w.l. 7.2, pH 9.6, cl <sub>2</sub> 180,000 PP 300 psi, 45 rpm, wt. on bit 0# Jar on fish 4 Run free point and back off at 9827' 6 Circulate and condition mud 14	
1-16-81		120 days Total Depth: 10,608' PBD 10,171 Top of Fish 9827' Present Operation: Circulating on top of fish. Mud wt. 10.5; Vis 8.2; W.L. 4; ck 3/32"; pH 9.6; Solids 8% PP 400#, 0 rpm, wt. on bit 0# Bit #8: 8 3/4" HTD J-44 Circulate and condition mud 6 3/4 hrs. Short trip 1 3/4 hrs. TOOH w/fishing jars 7 hrs. Change BHA 2 1/2 hrs. TIH 4 hrs. Ream 150' to bottom 2 hrs.	
1-17-81		121 days Total Depth: 10,608' PBD 10,171' Top of fish 9827' Present Operation: TIH w/wash pipe Mud wt. 10.5, vis 47, w.l. 3.2, ck 1/32, pH 8.6, solids 7% PP 400 psi Trips 11 Circulate & condition mud 5-1/2 Ream & work through tight spot 10 stands off bottom 4 Pick up 5 jts wash pipe 3-1/2	

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LEASE UNIT NAME AND WELL NO.		REGION
Federal "DE" #1		Western
COUNTY - PARISH - STATE - PROVINCE	FIELD OR PROSPECT NAME	AFE NUMBER
Grand County, Utah	Ten Mile	**
DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED	
1-18-81	122 days Total Depth: 10,608' PBD 10,171' Top of fish at 9827' Present Operation: T00H w/wash pipe Mud wt. 10.5, vis 57, w.l. 2.8, ck 1/32, pH 8.6, solids 7%, cl <sub>2</sub> 180,000 PP 550 psi, 30 rpm, wt. on bit 5,000# Wash over fish from 9827-9977' 20 Circulate and condition mud 2-1/4 T1H w/wash pipe 1-3/4	
1-19-81	123 days Total Depth: 10,608' PBD 10,171' Top of fish @ 9881' Present Operation: Trip out of hole w/1 drill collar Mud wt. 10.2, vis 52, w.l. 2.6, ck 1/32, pH 8.6, solids 7% Stand back wash pipe 2-1/2 Jar on fish 2-1/4 Wireline w/Dia-Log (back off @ 9881) 5-1/2 Trips 13-3/4	
1-20-81	124 days PBD 10,171' Present Operation: Waiting on cement trucks Mud wt. 10.3, vis 52, w.l. 2.6, ck 1/32, pH 8.6, solids 7%, cl <sub>2</sub> 180,000 PP 200 psi, 40 rpm, wt. on bit 0 T00H w/1 drill collar 4 Lay down BHA 2 Lay down wash pipe 1 Cut drilling line 3 Lay down drill collars 3-1/2 T1H open ended 2-1/2 Circulate and wait on cementers 8	
1-21-81	125 days Total Depth: 10,608' Present Operation: Nipple down BOP's and clean mud pits Circulate 1 Lay down drill pipe 10-1/4 Plug well w/Halliburton 5-3/4 Nipple down BOP's 7	

**INSTRUCTIONS:** Submit a Completion Report as soon as possible after filing regulatory agency completion report or a well is P & A. When operations are resumed on wells reported as suspended or TA, a Completion Report must be submitted as if the well had not been suspended or TA. On workovers when a regulatory agency completion report is not required upon completion, report completion and representative test data in spaces provided. Description of work performed on workovers and the plugging of wells other than drilling wells may be summarized giving inclusive dates, on the Completion Report form in which case Initial and Interim Reports are not required. Give bottom hole location on all directionally drilled wells.

LEASE / UNIT NAME AND WELL NO. Federal "DE" #1 <i>23S, 18E, #20</i>		OPERATOR Cities Service Company		REGION Western	
COUNTY-PARISH-STATE-PROVINCE Grand Co., Utah		FIELD OR PROSPECT NAME Ten Mile		ESTIMATED 100% D & E COST AT COMP.	
CLASS OF WELL OIL <input type="checkbox"/> GAS <input type="checkbox"/> SERV <input type="checkbox"/>		DRLG. COST INTEREST IF DIFFERENT FROM GROSS WI		COMPANY GROSS WI 100%	
				NET REV. INT. 78.50%	

FINAL BOTTOM HOLE LOCATION

SW SE Sec. 20-T23S-R18E

DATE AND DEPTH	DESCRIPTION OF WORK PERFORMED
1-22-81	<p>126 days  Total Depth: 10,608'  Set cement plugs as follows:  7200-7400' 180 sx  5100-5300' 100 sx  1900-2100' 135 sx  1430-1630' 110 sx  0-50' 20 sx  Nipple down BOP's 7-1/2  Filled hole w/fresh water before setting surface plug. Well  P &amp; A 1-21-81. Released rig 1:30 pm, 1-21-81.  <u>LAST REPORT</u></p>

TD-MEASURED 10,608'	PBTD Surface	TVD 10,608'
------------------------	-----------------	----------------

POTENTIAL TEST DATA		GAS PLANT CONNECTION									
DATE	RESERVOIR	PRODUCING INTERVAL	TBG PR	CSG PR	CHK. SIZE	BOPD	MCF/D	% WTR.	GOR	CORR. GR.	TEST TIME
		Plugged and Abandoned									

PRODUCTION ESTIMATE (COMPLETE EVEN IF WELL IS SHUT IN)							
RESERVOIR	BOPD	MCF/D	BWPD	DATE ON PRODUCTION ESTIMATED (OR ACTUAL)		DATE THE PERMANENT WELL HEAD WAS INSTALLED	





CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202

January 30, 1981

RECEIVED

FEB 2 1981

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

DIVISION OF  
OIL, GAS & MINING

ATTN: Michael T. Minder

RE: Cities Service Company  
Lakeside A #1  
NE NE Section 1-T3N-R9W  
Box Elder County, Utah

Cities Service Company  
Federal DE #1  
SW SW Section 20-T23S-R18E  
Grand County, Utah  
Federal Lease # U-40332

Dear Sir:

Please find enclosed three (3) copies each of State of Utah, Form OGC-8-X, "Report of Water Encountered During Drilling", for the above referenced wells.

If you have any questions concerning this information, please feel free to contact this office.

Sincerely,

Richard O. Berg  
Operations Manager  
Western Region

ROB/RJM/nrm  
Enclosures

FILE IN TRIPLICATE  
FORM OGC-8-X

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

RECEIVED

FEB 2 1981

DIVISION OF  
OIL, GAS & MINING

\*REPORT OF WATER ENCOUNTERED DURING DRILLING\*

Well Name & Number Federal DE #1  
Operator Cities Service Company Address 1600 Broadway, Suite 900  
Denver, Colorado 80202  
Contractor Empire Drilling Company Address 3025 S. Parker Road, Suite 1221  
Aurora, Colorado 80114  
Location SW 1/4 SW 1/4 Sec. 20 T. 23S R. 18E County Grand

Water Sands

	<u>Depth</u>	<u>Volume</u>	<u>Quality</u>
	From To	Flow Rate or Head	Fresh or Salty
1.	2167' - 2173'	N/A	Salty
2.	2180' - 2190'	N/A	Salty
3.	2500' - 2510'	N/A	Salty
4.	2750' - 2785'	N/A	Salty
5.			

(Continue of reverse side if necessary)

Formation Tops See reverse side

Remarks

The above referenced well was plugged and abandoned on January 21, 1981.

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.



CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

February 11, 1981

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

ATTN: Mr. M.T. Minder

RE: Cities Service Company  
Federal DE #1  
SW SE Section 20-T23S-R18E  
Grand County, Utah

Dear Sir:

Enclosed please find three (3) copies each of U.S.G.S. Form 9-331, "Sundry Notices and Reports on Wells: Request for Approval to and Subsequent Report of", for the above referenced well.

Also included are two (2) copies each of U.S.G.S. Form 9-330, "Well Completion or Recompletion Log" and two (2) copies of each of the following:

Well History  
Borehole Compensated Sonic Log  
Dual Laterolog  
Compensated Neutron Formation Density Log  
Drill Stem Test #1

Copies of the Geological Report will be forwarded as soon as they become available. If you have any further requirements concerning this well, please feel free to contact this office.

Sincerely,

James R. Vaughan  
Region Engineering Manager  
Western Region

JRV/nrm  
Enclosures

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☐ well other Dry Hole

2. NAME OF OPERATOR  
Cities Service Company

3. ADDRESS OF OPERATOR  
1600 Broadway, Suite 900, Denver, CO 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 574' FSL and 1895' FEL (SW SE)  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☒  
(other) \_\_\_\_\_

SUBSEQUENT REPORT OF:

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐

5. LEASE

U-40332

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

Federal DE

9. WELL NO.

1

10. FIELD OR WILDCAT NAME

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Section 20-T23S-R18E-SLB & M

12. COUNTY OR PARISH

Grand

13. STATE

Utah

14. API NO.

43-019-30647

15. ELEVATIONS (SHOW DF, KDB, AND WD)

4544' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Intent to set cement plugs as follows:

Plug #1: 7200 - 7400' 180 sx Class B, 16.2# salt/sx and .2% HR-4  
Plug #2: 5100 - 5300' 100 sx Class B, 16.2# salt/sx and .2% HR-4  
Plug #3: 1900 - 2100' 135 sx Class B, 16.2# salt/sx  
Plug #4: 1430 - 1630' 110 sx Class B, 16.2# salt/sx  
Plug #5: Surface - 50' 20 sx Class B, 16.2# salt/sx

Abandon well after setting plugs.

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE \_\_\_\_\_

BY \_\_\_\_\_

Set @ \_\_\_\_\_ Ft.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct.

SIGNED James R. Thompson TITLE Region Engineering Mgr. DATE February 11, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: City Service Co Jim Vaughan

WELL NAME: Federal DE #1

SECTION 20 TOWNSHIP 23S RANGE 18E COUNTY GRD.

VERBAL APPROVAL GIVEN TO PLUG THE ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: PBD 10,150

CASING PROGRAM:

FORMATION TOPS:

Chinle	1508
Moenkopie	1953
White Rim	2748
Hermosa	4192
Ismay	5152
Desert Creek	5451
Paradox Salt	5690
Molar	9763
Elbert	10 433

PLUGS SET AS FOLLOWS:

DATE \_\_\_\_\_

SIGNED \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See reverse in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

15

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input checked="" type="checkbox"/>	Other _____		
b. TYPE OF COMPLETION:		NEW WELL <input type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG-BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other <u>Plug &amp; Abandon</u>
2. NAME OF OPERATOR <u>Cities Service Company</u>							
3. ADDRESS OF OPERATOR <u>1600 Broadway, Suite 900, Denver, Colorado 80202</u>							
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface <u>574' FSL and 1895' FEL (SW SE)</u> At top prod. interval reported below <u>Same as above</u> At total depth <u>Same as above</u>							
14. PERMIT NO. <u>43-019-30647</u>				DATE ISSUED <u>8/7/80</u>			
15. DATE SPUDDED <u>9/18/80</u>		16. DATE T.D. REACHED <u>1/6/81</u>		17. DATE COMPL. (Ready to prod.) <u>Plugged 1/21/81</u>		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <u>4555' RKB</u>	
19. ELEV. CASINGHEAD <u>4544' GR</u>							
20. TOTAL DEPTH, MD & TVD <u>10,608'</u>		21. PLUG, BACK T.D., MD & TVD <u>Plugged</u>		22. IF MULTIPLE COMPL., HOW MANY* <u>N/A</u>		23. INTERVALS DRILLED BY <u>→</u>	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* <u>N/A</u>		25. WAS DIRECTIONAL SURVEY MADE <u>No</u>					
26. TYPE ELECTRIC AND OTHER LOGS RUN <u>BHC Sonic Dual Laterolog, Compensated Neutron Formation Density</u>						27. WAS WELL CORED <u>Yes</u>	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
<u>9-5/8"</u>	<u>36#</u>	<u>1515'</u>	<u>12-1/4"</u>	<u>500 sx 50/50 pozmix and 250 sx Class "B"</u>		<u>None</u>	
29. LINER RECORD							
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)			
30. TUBING RECORD							
SIZE	DEPTH SET (MD)	PACKER SET (MD)					
31. PERFORATION RECORD (Interval, size and number)							
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED			
33.* PRODUCTION							
DATE FIRST PRODUCTION <u>N/A</u>		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in) <u>P&amp;A</u>	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD <u>→</u>	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE <u>→</u>	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)						TEST WITNESSED BY	
35. LIST OF ATTACHMENTS <u>Electric Logs, DST #1, and Well History</u>							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <u>James R. Vaughan</u>		TITLE <u>Region Engineering Manager</u>				DATE <u>2/11/81</u>	

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 33.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
White Rim	2775'	2803'	Cored 28' sandstone, recovered 26.5' -no show	White Rim	2748'		1807'
Paradox	7498'	7543'	DST #1: GTS immediately, 41 MCF/D volume after 50 minutes, recovery-620' GCDM, 30 minutes ISIP: 1712 psi, 100 minutes FSIP: 1333 psi.	Hormose	4192'		363'
				Ismay	5152'		(-597')
				Desert Creek	5451'		(-896')
				Paradox	5690'		(-1135')
				Mollas	9763'		(-5208')
				Elbert	10433'		(-5878')
							Subsea

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well ☐ gas well ☐ other Dry Hole
2. NAME OF OPERATOR  
Cities Service Company
3. ADDRESS OF OPERATOR  
1600 Broadway, Suite 900, Denver, CO 80202
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 574' FSL and 1895' FEL (SW SE)  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☒  
(other) \_\_\_\_\_

SUBSEQUENT REPORT OF:

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐

5. LEASE  
U-40332
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A
7. UNIT AGREEMENT NAME  
N/A
8. FARM OR LEASE NAME  
Federal DE
9. WELL NO.  
1
10. FIELD OR WILDCAT NAME  
Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 20-T23S-R18E-SLB & M
12. COUNTY OR PARISH Grand 13. STATE Utah
14. API NO.  
43-019-30647
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4544' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Intent to set cement plugs as follows:

Plug #1: 7200 - 7400' 180 sx Class B, 16.2# salt/sx and .2% HR-4  
Plug #2: 5100 - 5300' 100 sx Class B, 16.2# salt/sx and .2% HR-4  
Plug #3: 1900 - 2100' 135 sx Class B, 16.2# salt/sx  
Plug #4: 1430 - 1630' 110 sx Class B, 16.2# salt/sx  
Plug #5: Surface - 50' 20 sx Class B, 16.2# salt/sx

Abandon well after setting plugs.

APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING

DATE: 3/3/81

BY: [Signature] Sat. @ \_\_\_\_\_ Ft.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct.

SIGNED James R. [Signature] TITLE Region Engineering Mgr. DATE February 11, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:





CITIES SERVICE COMPANY  
ENERGY RESOURCES GROUP

March 19, 1981

900 Colorado State Bank Building  
1600 Broadway  
Denver, Colorado 80202  
(303) 861-2464

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

ATTN: Mr. M.T. Minder

RECEIVED  
MAR 23 1981  
DIVISION OF  
OIL, GAS & MINING

RE: Cities Service Company  
Federal DE #1  
SW SE Section 20-T23S-R18E  
Grand County, Utah

Dear Sir:

Enclosed please find three (3) copies of the Geological Report on the above referenced well.

If you have any further requirements concerning this well, please feel free to contact this office.

Sincerely,

James R. Vaughan  
Region Engineering Manager  
Western Region

JRV/nrm  
Enclosures

GEOLOGICAL REVIEW

CITIES SERVICE OIL CO.  
Federal DE - 1,  
Sec. 20, T 23 S - R 18 E  
Grand Co. Utah

By: B. F. Latch

*B. F. Latch*

CPG # 1701

Feb. 28, 1981

B. F. LATCH

## GEOLOGICAL REVIEW

CITIES SERVICE OIL CO.  
Federal DE - 1,  
Sec. 20, T 23 S - R 18 E  
Grand Co. Utah

### GENERAL OPERATIONS:

The drilling of this well was undertaken using rotary tools. Clear water and a gel mud were utilized as a circulating medium until the top of the salt was reached. At this point a conversion was made to a salt saturated mud and this was used until final total depth was reached. While drilling the salt section, it was necessary to add some weight material to control abnormally pressured gas associated with carbonaceous shales encountered in the salt section.

The drilling objectives were accomplished, but considerable operational problems were encountered in the lower portions of the hole. Several complicated fishing jobs were encountered and the hole finally had to be sidetracked to avoid an unrecoverable fish. However, at no time did hazards develop that endangered either the drilling equipment or the lives of the drilling personnel involved.

Thirty foot samples were caught from grass roots to a depth of 1515'. Ten foot samples were caught from 1515' to the total depth of 10,608'. Sample quality ranged from fair to good from under the intermediate casing to total depth.

### EVALUATION:

A full time mud logging unit was utilized from underneath the intermediate casing to total depth. This unit was equipped with both a hot wire and a chromatograph for

hydrocarbon analysis. An H<sub>2</sub>S detector was activated at the top of the evaporite section and a CO<sub>2</sub> detector was utilized from the base of the salt to total depth.

Samples from 1515' to total depth were caught and microscopically examined while drilling was in progress. An interpretative sample log, scale of 2" = 100' has been prepared from this data, adjusted to electrical log depths, and is submitted as a part of this report.

One core was cut in this operation from 2775' - 2803'. This core was for research purposes and no economic value or shows were associated with this operation.

Drill stem testing was the prerogative of the supervising geologist and one was conducted. The test from 7498' - 7543' covered a clastic interval within the salt section. This zone displayed the most significant shows encountered in this well. Although gas flowed to the surface, pressure data indicated a low permeability reservoir that suffered significant depletion during the test period.

Upon reaching a total depth of 10,608' the following electrical logging program was carried out.

Dual LL w GR	1515' to TD
BHC Sonic w GR	1515' to TD
CNL-FDC w caliper	selected intervals

Quantitative evaluation of these logs substantiated the sample analysis and revealed no additional zones of interest. It was then recommended that the well be plugged and abandoned.

# CONCLUSIONS:

Evaluation of all data available indicated that this well had no commercial potential.

The following plugging program was submitted to and approved by Mr. Rafoul of the U. S. G. S. in Salt Lake City, Utah. This program was subsequently approved by the State of Utah Oil Conservation Commission.

Plug # 1,	7400' - 7200'
Plug # 2,	5300' - 5100'
Plug # 3,	2100' - 1900'
Plug # 4,	1630' - 1430'
Plug # 5,	cut casing off three feet below ground level. Plug with 20 sx. and implace proper dry hole marker.

Location is to be cleaned up and restored in compliance with B. L. M. requirements and regulations.

Important formation tops are as follow:

Age	Name	Depth	Datum
Triassic	Chinle	1580	+2975
Permian	Moenkopi	1953	+2602
"	White Rim ss	2748	+1807
Pennsylvanian	Hermosa	4192	+ 363
"	" Ismay (upper)	5152	- 597
"	" Desert Creek	5451	- 896
"	" Salt	5690	-1135
"	" Base salt	9580	-5025
"	" Molas	9763	-5208
Mississippian	Leadville	9802	-5247
Devonian	Ouray	10,292	-5737
"	Elbert	10,433	-5878
TD.		10,608	-6053